

# **Exhibit 12**

**Expert Report of Emre Carr, Ph.D., CFA**

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

In re

CUSTOMS AND TAX ADMINISTRATION  
OF THE KINGDOM OF DENMARK  
(SKATTEFORVALTNINGEN) TAX  
REFUND SCHEME LITIGATION

MASTER DOCKET

18-md-02865 (LAK)

**EXPERT REPORT OF EMRE CARR, PH.D., CFA**

Emre Carr, Ph.D., CFA

December 31, 2021

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**I. INTRODUCTION**

**A. Assignment and Scope**

1. I have been retained by certain Defendants to review trades in Danish securities and associated instruments conducted by certain U.S. pension plans in connection with the above-captioned multidistrict litigation, *In re Customs and Tax Administration of the Kingdom of Denmark (Skatteforvaltningen) Tax Refund Scheme Litigation*, 18-md-02865 (LAK).
2. Counsel has asked me to explain how the pension plans conducted stock trading, hedging through flex futures and forward contracts, and financing through stock lending, and the mechanics of payments related to corporate dividends, among other things.
3. In this report, I provide a tutorial on how securities trading works, and describe transactions by two “Plans” in shares of two Danish companies and related hedging transactions (hereinafter the “Analyzed Transactions”) conducted through custodians Solo Capital Partners LLP (“Solo Capital”) and Old Park Lane Capital Limited (“Old Park Lane”), respectively.
4. The Analyzed Transactions are: (i) a March 2013 purchase of A.P. Moller-Maersk class B stock (“MAERSKB”) by RJM Capital Pension Plan (the “RJM Plan”); and (ii) a November 2014 purchase of Chr. Hansen stock by The Proper Pacific LLC 401(k) Plan Pension Plan (the “Proper Pacific Plan”), as well as related transactions.

**B. Expert Qualifications**

5. I am a Senior Managing Director in the Forensic and Litigation Services Practice at FTI Consulting, Inc. (“FTI”). FTI is a multi-disciplined consulting firm that provides a variety of financial advisory services to corporate clients in the U.S. and abroad. The Forensic and Litigation Services Practice specializes in providing financial, accounting, economic, and investigative consulting services to clients.

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6. I have consulted in engagements that involve public and private companies, investment companies, banks, securities and commodities brokers and dealers, and insurance companies in the U.S. and elsewhere. The subjects of these engagements have included financial regulations, structured finance, securities and commodities trading, clearing and execution, securities lending, derivatives transactions, investment advisory services, corporate internal controls, corporate governance, and valuation.
7. Previously, I was a Senior Financial Economist at the Division of Risk, Strategy, and Financial Innovation (“RiskFin”) of the U.S. Securities and Exchange Commission (“SEC”), later renamed the Division of Economic and Risk Analysis. RiskFin was created as the agency’s “think tank” to provide sophisticated, interdisciplinary analysis and economic advice across the entire spectrum of SEC activities, including policymaking, rulemaking, enforcement, and examinations. As a Senior Financial Economist, I conducted economic analyses for the design of SEC rules to govern securities offerings; security-based swaps clearing, execution, and reporting; cross-border application of security-based swap regulations; asset-backed securities issuance and reporting; beneficial ownership reporting; central counterparties; possible adoption of the international financial reporting standards in the U.S.; restrictions on proprietary trading by commercial banks; and required disclosures of off-balance sheet exposures and liquidity. I have statistically analyzed over-the-counter derivatives activities of security-based swap dealers, and banks’ securitization of financial assets to inform the rulemaking.
8. While at SEC, I have participated in enforcement investigations and compliance inspections related to equities, fixed income securities, swaps, other derivatives, and structured financial products. The subjects of these investigations included global banks headquartered in the U.S., Canada, and Europe, insurance companies, broker-dealers, and investment firms.
9. I have consulted in several engagements that involved risk and liquidity management, customer cash handling, trading supervision at securities and

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commodities broker-dealers, structured finance activities, regulatory domicile analysis of equity, fixed income and swap transactions around the globe, corporate internal controls, and valuations of investment entities. Some of these engagements involved assessing the performance of regulators in their own activities.

10. I have taught graduate-level courses on financial statement analysis for valuation and credit decisions, corporate finance, and accounting at the University of Maryland, Columbia University, the University of Southern California, the University of Toronto, and Northwestern University.
11. I earned my Ph.D. degree in Accounting Information and Management at the Kellogg School of Management at Northwestern University. My Ph.D. dissertation examined the use of structured finance transactions for regulatory capital management in banking. In addition, I completed all coursework except the dissertation for the Ph.D. degree in finance.
12. I earned my MBA degree with a concentration in finance from the University of Southern California. I am a CFA® charterholder, granted by the CFA Institute.<sup>1</sup> CFA Institute is the premier global association for investment management professionals and represents the industry gold standard for effective and ethical investment management practices.<sup>2</sup>
13. My curriculum vitae, including a list of all publications authored in the past ten years and the cases in which I have testified as an expert at deposition or at trial during the previous four years, are attached as **Exhibit 1**.
14. FTI is being compensated for my services in this action at an hourly rate of \$1,015. Neither I nor FTI has any financial interest in the outcome of this litigation, nor does our compensation depend in any way on the content of the opinions set forth in this

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<sup>1</sup> CFA refers to Chartered Financial Analyst and is a registered trademark of CFA Institute.

<sup>2</sup> CFA Institute, "CFA Institute Programs," *available at* <https://www.cfainstitute.org/en/programs> (last accessed on December 17, 2021).



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report. In addition, under my direction, FTI staff performed research and other tasks for me in this action.

**C. Information Relied Upon**

15. In performing my analyses and in forming my opinions and conclusions, I have relied upon data and information from various sources, all of which are reasonably relied upon by experts in my field. **Exhibit 2** lists the materials that I have considered or relied upon in forming my opinions in this action. The documents that I rely upon include documents cited in this report and its exhibits. I have also relied upon my professional experience and expertise obtained over many years as a professional economist. I am prepared to amend and expand my analyses if I consider it necessary after receiving further information regarding this action.
16. Regarding any anticipated trial testimony in this action, I may use various documents produced in this litigation that refer to or relate to the matters discussed in this report. Although I may cite to a particular page or pages of documents in this report, such pinpoint cites are provided for clarification purposes only, and other portions of the documents and depositions cited may be relevant for my analyses in this matter. In addition, citations to a document or documents are intended to be illustrative and are not exhaustive. Further, I may create or assist in the creation of certain demonstrative schedules to assist me in testifying. To date, I have yet to create such demonstratives.

**D. Summary of Opinions**

17. As discussed in more detail throughout this report, my opinions include the following:
  - a. The Analyzed Transactions that I discuss in detail in this report are an example of dividend arbitrage strategies.
  - b. Dividend arbitrage strategies are neither new nor unique examples of how tax incentives influence financial decisions and investment strategies. Academic research has shown that investors in numerous countries have engaged in dividend arbitrage.

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- c. As discussed below, when the Plans' orders to purchase shares of the relevant stock were executed, the economic risk associated with holding shares in those stocks was instantly transferred from the seller of the shares to the buyer even though clearing and settlement did not happen that day. Because the Plans purchased the shares prior to what is known as the "ex-dividend" date for the stock, the Plans paid a "cum-dividend" price, meaning that the purchaser had an economic claim to the forthcoming dividend amount. The purchases were reflected on confirmations and statements provided to the Plans.
- d. Records at a central securities depository such as VP Securities in Denmark are unlikely to reflect the name of all the investors that have economic exposure to a security for a variety of reasons, including the time it takes for the central securities depository to record a transfer of ownership after a stock trade has occurred, the presence of intermediaries in the chain of ownership between investors and their securities holdings, the use of omnibus accounts at custodians, and the practice of securities lending. Investors only have visibility into their account holdings at the custodian closest to them; they do not have visibility into the CSD or other intermediaries in the custody chain.
- e. Derivative instruments like flex futures and forward contracts used in the Analyzed Transactions for hedging price risk are distinct from stock. Entering a derivative position (*e.g.*, flex futures) tied to the value of a stock does not alter the underlying long position in that stock. Derivative instruments are commonly used to hedge price risk.
- f. Securities lending is a common practice in the market and is widely understood to promote market efficiency and liquidity. The party that lends out security holdings maintains its economic exposure to the securities. Investors sometimes use securities lending for financing, and, in economic substance, a securities lending transaction is effectively a loan collateralized by the shares when used for financing purposes.

**II. OVERVIEW OF THE PENSION PLAN STRATEGY**

- 18. This case involves the use of a tax-advantaged trading strategy (referred to as "the Pension Plan Strategy") that aimed to generate profits from market participants' tax differentials on dividends while managing the price risk of the underlying shares. The Pension Plan Strategy is a type of dividend arbitrage strategy.

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19. The Analyzed Transactions,<sup>3</sup> involve among other things, trading in stocks of two Danish Companies:<sup>4</sup>
  - a. A.P. Moller-Maersk A/S; and
  - b. Chr. Hansen Holding.
20. The company A.P. Moller-Maersk, a large Danish company, “is an integrated container logistics company and member of the A.P. Moller Group.”<sup>5</sup> By 2020, the company had 80,000 employees in over 130 countries and had revenues of \$39.74 billion.<sup>6</sup> As of 2013 (*i.e.*, the year in which the RJM Plan traded in class B shares of A.P. Moller-Maersk A/S<sup>7</sup>), the company had annual revenues of DKK 266,236

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<sup>3</sup> I have been provided with documents related to trades in several other Danish stocks and, from an economic perspective, the trades in those stocks also seem to have followed the Pension Fund Strategy described in this report. I provide list of all these documents in **Exhibit 2**.

<sup>4</sup> MPSKAT00077418-9; MPSKAT00085289; PROPPACIF00001327; PROPPACIF00001396.

<sup>5</sup> See A.P. Moller - Maersk, “About A.P. Moller – Maersk,” *available at* <https://www.maersk.com/about> (last accessed on December 27, 2021), describing the company as “Connecting and simplifying trade to help our customers grow and thrive. With a dedicated team of over 80,000, operating in 130 countries; we go all the way to enable global trade for a growing world.”

See also Bloomberg, L.P. company description (screenshot provided at **Exhibit 3**) describing that the company “operated as an integrated transport and logistics company” and “offers container vessels, supply ships, special vessels, terminals, tugboat activities and reefer container box manufacturing” for worldwide clients.

I access the Bloomberg database through a Bloomberg terminal. Bloomberg describes the terminal as: “Sitting on the desks of 325,000 of the world’s most influential decision makers, the Bloomberg Terminal is a modern icon of financial markets. Launched in 1981, long before PCs and the internet became ubiquitous, the Bloomberg Terminal brought transparency to financial markets. It connected market participants to a groundbreaking data, analytics and information-delivery service — and revolutionized an industry.” Bloomberg L.P., “The Terminal: Bloomberg Professional Services,” *available at* <https://www.bloomberg.com/professional/solution/bloomberg-terminal/> (last accessed on December 27, 2021).

<sup>6</sup> A.P. Moller - Maersk Annual Report 2020 (*available at* <https://www.maersk.com/year-in-review-2020> (last accessed on December 27, 2021), p. 4.

<sup>7</sup> The RJM Plan traded in both class A and class B shares issued by A.P. Moller-Maersk A/S. Only the trades in class B shares are reviewed in the Analyzed Transactions. The dividend per share was same for both the class of shares. **Exhibit 4** (Bloomberg, L.P. screenshot).

Class A shares have voting rights whereas class B shares do not. A.P. Moller-Maersk A/S Annual Report 2013, p. 66 (“The total share capital of DKK 4,395.6m consists of 4,395,600 shares equally split between A and B shares.”), *available at* <https://investor.maersk.com/static-files/f9126c88-9da0-4b11-8960-a70056e5b5d8>. (last accessed on December 27, 2021)

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million (about \$49 billion), and had 2.198 million shares outstanding for its class B shares.<sup>8</sup>

21. The company Chr. Hansen Holding A/S, another large Danish company, is “a global, differentiated bioscience company that develops natural ingredient solutions for the food, nutritional, pharmaceutical and agricultural industries.”<sup>9</sup> “For four consecutive years (2018 – 2021) Chr. Hansen has been listed on Corporate Knights’ list of the Global 100 Most Sustainable Corporations.”<sup>10</sup> During 2020-2021, Chr. Hansen had revenue of EUR 1.077 billion.<sup>11</sup> As of 2014 (*i.e.*, the year in which Proper Pacific Plan traded in shares of Chr. Hansen Holding), the company had revenues of EUR 756.2 million, and had 131,125,177 shares outstanding.<sup>12</sup>
22. As discussed in detail in §VIII, both Analyzed Transactions involved four general steps on behalf of the relevant investor.
23. *First*, prior to both what is referred to as the issuer’s “ex-dividend date”<sup>13</sup> and the issuer’s “record date,”<sup>14</sup> the Plans purchased shares of a dividend-paying stock, thereby obtaining immediate economic exposure to fluctuations in the stock’s value and a claim to an amount equal to the forthcoming dividend.

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<sup>8</sup> Revenue from A.P Moller-Maersk A/S 2013 Annual Report, p. 4. Shares outstanding remained constant throughout 2013. **Exhibit 5** (Bloomberg, L.P. screenshot). Revenue converted to USD using an exchange rate of 0.1842 USD per DKK, as of December 31, 2013 from Bloomberg, L.P. **Exhibit 6** (Bloomberg, L.P. screenshot).

<sup>9</sup> Chr. Hansen, “About Us,” *available at* <https://www.chr-hansen.com/en/about-us> (last accessed on December 28, 2021); **Exhibit 7** (Bloomberg L.P. screenshot) describing Chr. Hansen as a company that “develops and produces natural ingredients such as cultures, enzymes, probiotics, and natural colors” and “offers products for the food, nutritional, pharmaceutical, and agricultural industries.”

<sup>10</sup> Chr. Hansen, “About Us,” *available at* <https://www.chr-hansen.com/en/about-us> (last accessed on December 28, 2021).

<sup>11</sup> Chr. Hansen Annual Report, 2020/21, p. 8, *available at* <https://www.chr-hansen.com/en/investors/reports-and-presentations> (last accessed on December 28, 2021).

<sup>12</sup> Chr. Hansen’s 2013/2014 Annual Report, pp. 4, 73, *available at* <https://www.chr-hansen.com/en/investors/reports-and-presentations/archive> (last accessed on December 28, 2021).

<sup>13</sup> The ex-dividend date is the date as of which purchasers of stock do not have a claim to the forthcoming dividend declared at the issuer’s most recent Annual General Meeting. This is discussed in more detail in §VI.

<sup>14</sup> The record date is the date that the issuer checks its stock record to identify shareholders to which it will direct the dividend declared at the issuer’s most recent Annual General Meeting. This is discussed in more detail in §VI.

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24. *Second*, on the same day as the stock purchase date, the Plans entered either “flex futures” or “forward” contracts to sell the same number of shares of the same stock at a later date. The contracts provided protection against price fluctuations in the relevant shares.<sup>15</sup>
25. *Third*, the Plans financed the share purchase by lending out those shares in exchange for a fee and cash collateral. The start date of the loan term (*i.e.*, the date on which the Plans received cash collateral in exchange for the underlying securities) occurred after the stock issuer’s “record date.”
26. *Fourth*, also after the record date, the Plans “unwound” each piece of the overall transaction, *i.e.*, recalled the lent shares, sold the shares, and reversed the flex futures or forward contracts by entering the opposite contracts.<sup>16</sup>

**III. HOW STOCK TRADING WORKS**

27. When investors purchase or sell shares of a stock, there are three related processes: (i) trade execution, which is followed by the post-trade execution processes of (ii) clearance; and (iii) settlement. Each of these steps is described below.
28. A purchase or sale of shares does not involve the transfer of physical certificates of the traded stock when the stock certificates have been dematerialized. For example, in Denmark, almost all securities are dematerialized, and this was the case for the shares traded in the Analyzed Transactions.<sup>17</sup>

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<sup>15</sup> Flex futures and forward contracts are agreements to buy or sell a security or a commodity at a specified price on a future date. The contracts are distinct products from shares and are commonly known as derivatives as their value depends on the related shares. I discuss the details of these contracts in §IV of this report.

<sup>16</sup> Investors can exit these contracts before the maturity date by entering into the opposite position (*i.e.*, buy for sell or *vice versa*) on contracts with the same specifications. I discuss this in more detail in §IV.B.

<sup>17</sup> *See, e.g.*, RBC Investor & Treasury Services, “Market Profiles: Denmark,” *available at* <https://www.rbcits.com/en/gmi/global-custody/market-profiles/market.page?dcr=templatedata/globalcustody/marketprofiles/data/denmark> (last accessed on December 17, 2021) (“Nearly all listed securities are in book-entry form and generally denominated in DKK. The listed securities cover shares, bonds, money markets instruments, futures, options and mutual funds.”)

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29. In the case of dematerialized shares, security holdings and related transfers are tracked through what is commonly called “book entry.”<sup>18</sup> Book entry is a method of tracking transfers and ownership of securities where no physical security is given to investors. The importance of book entry for security transactions and ownership is generally recognized in law.<sup>19</sup>
30. In fact, brokers use book entries to keep track of all activity and holdings in their clients’ accounts, including total holdings in a given security, details of collateral assets, cash, and cash equivalents.<sup>20</sup>
31. My discussion of the Analyzed Transactions is based on, among other things, my review of book entries reflected in the statements received by the Plans.

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<sup>18</sup> The book entry following a new trade execution occurs on the trade date because the economic exposure of an investor starts as soon as the trade is executed. *See, e.g.*, Francotte, Pierre, “Chapter 10: Clearing and Settlement of Book-Entry Securities Transactions,” International Monetary Fund, Current Developments in Monetary and Financial Law, Vol. 1, 1999, pp. 271-289, p. 275 (stating “all transfers take place through movements in the accounts of the seller and the buyer of the securities (or more generally of the transferor and the recipient, since the underlying transaction need not be a sale, but could be a pledge or any other form of transfer). This is called a ‘book-entry’ transfer of securities.”).

<sup>19</sup> For example, the Danish central securities depository, VP Securities, uses book entry to track securities on its system. *See generally* Euronext Securities, “VP Rule Book, Book Entry Rules,” 11 October 2021, *available at* <https://www.vp.dk/Legal-Framework/VP-Rulebook> (last accessed December 29, 2021).

As another example, Uniform Commercial Code § 8-501(b) says that “a person acquires a security entitlement if a securities intermediary: (1) indicates by book entry that a financial asset has been credited to the person’s securities account.” And subsection (c) says that as long as a “condition of subsection (b) has been met, a person has a security entitlement even though the securities intermediary does not itself hold the financial asset.”

<sup>20</sup> *See* Fidelity, “About Statements,” *available at* [https://www.fidelity.com/webcontent/ap002390-mlo-content/19.09/help/learn\\_portfolio\\_statements.shtml#accountrecords](https://www.fidelity.com/webcontent/ap002390-mlo-content/19.09/help/learn_portfolio_statements.shtml#accountrecords) (last accessed on December 17, 2021) (“Statements on single accounts show: ... income summary, contributions and distributions, realized gain and loss from sales, holdings, and transaction details for the time period covered by the report ...”); *see also* Nordea, “Book-entry Account and Securities Custody,” *available at* <https://www.nordea.fi/en/personal/our-services/savings-investments/investments/book-entry-account.html> (last accessed on December 29, 2021) (“When you buy equities or other securities, you don’t receive any traditional printed certificates but your holdings are recorded in the book-entry account instead. In other words, you need to open a book-entry account to store these electronic holdings and to use our trading service.”). Nordea is “a leading Nordic universal bank. At the end of 2020 [the bank] had a total operating income of EUR 8.5bn.” *available at* Nordea, “Who We Are,” *available at* <https://www.nordea.com/en/about-us/who-we-are> (last accessed on December 29, 2021).

**Expert Report of Emre Carr, Ph.D., CFA****A. Stock Trade Execution**

32. First, an investor places an order to buy (or sell) shares of an issuer through an executing broker. The broker then seeks to execute the trade consistent with the investor's instructions. In addition to specifying the security identifier or symbol, the side (*e.g.*, buy or sell), and the number of shares to be traded, an investor may also specify the price at which they are willing to trade, how long the order is in force (*e.g.*, the day, good until canceled), and other special instructions (*e.g.*, settlement date).<sup>21</sup> Trade execution happens when a seller agrees to sell and a buyer agrees to buy a security in a specified quantity at a specified price.
33. Executing brokers have multiple options for executing customer trades. For example, a broker can elect to take the opposite side of the trade and book the trade to its own proprietary account, seek liquidity from another party in the market, or a combination of the two.<sup>22</sup> A trade may be executed on a stock exchange (*e.g.*, Copenhagen Exchange in Denmark operated by Nasdaq Nordic),<sup>23</sup> in an alternative trading venue (*e.g.*, multilateral trading facilities in Europe),<sup>24</sup> or through bilateral

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<sup>21</sup> See, *e.g.*, Fidelity, "Trading FAQs: Order Types," *available at* <https://www.fidelity.com/trading/faqs-order-types> (last accessed on December 17, 2021), explaining several different types of orders an investor can place.

<sup>22</sup> See U.S. Securities and Exchange Commission, "Executing an Order," *available at* <https://www.investor.gov/introduction-investing/investing-basics/how-stock-markets-work/executing-order> (last accessed on December 28, 2021) ("Just as you have a choice of brokers, your broker generally has a choice of markets to execute your trade.").

<sup>23</sup> NASDAQ, "Nordic Equities," *available at* <https://www.nasdaq.com/solutions/nordic-equities> (last accessed on December 21, 2021) ("Nasdaq Nordic operates the exchanges in Sweden, Denmark, Finland and Iceland.").

<sup>24</sup> In Europe, alternative trading venues are called multilateral trading facilities ("MTF"). In the U.S., they are called Alternative Trading Systems. See Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU Text with EEA relevance, Article 4, 1, (22), *available at* <https://eur-lex.europa.eu/eli/dir/2014/65/oj/eng> (last accessed on December 17, 2021); U.S. Securities and Exchange Commission, "Alternative Trading Systems (ATSS)," *available at* <https://www.investor.gov/introduction-investing/investing-basics/glossary/alternative-trading-systems-atss> (last accessed on December 17, 2021).



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trading facilitated by a network of broker-dealers in what is known as an over-the-counter (“OTC”) market.<sup>25</sup>

34. There are various reasons that an investor seeking to trade a large number of shares (or brokers executing those trades on the investor’s behalf) might prefer to execute the trade in the OTC market.<sup>26</sup>
35. When a stock trade is executed, an investor receives a trade confirmation from the executing broker. The confirmation is evidence that the broker executed the trade and the terms on which it was executed.<sup>27</sup>
36. As soon as a trade is executed, the economic risk associated with holding the underlying shares is instantly transferred from the seller of the shares to the buyer. Suppose that an investor places an order to buy 100 shares of a stock, and the order for those shares is executed at DKK 42.5. Upon the trade’s execution, the investor immediately bears the economic risk of holding those 100 shares and is exposed to any gains (or losses) from price changes from that moment onwards. For example, if the price falls the next day to DKK 32.5, the purchaser, not the seller, bears that loss of DKK 10 per share (DKK 1,000 in the aggregate). This is true, irrespective of the time taken to complete the “background” processes of clearing and settling the trade. That is, the investor’s gains (or losses) are determined relative to the execution price

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<sup>25</sup> “Unlike exchanges, OTC markets have never been a ‘place.’ They are less formal, although often well-organized, networks of trading relationships centered around one or more dealers.” International Monetary Fund, “Markets: Exchange or Over-the-Counter,” *available at* <https://www.imf.org/external/pubs/ft/fandd/basics/markets.htm> (last accessed on December 27, 2021).

<sup>26</sup> *See, e.g.*, The U.S. Financial Industry Regulatory Authority’s (FINRA) discussion of U.S. equity trading, stating “[w]hen an institutional investor is making a large trade (think thousands of shares), they sometimes prefer to do so over the counter” for reason such as anonymity and price stability.” FINRA, “Unraveling the Mystery of Over-the-Counter Trading,” January 4, 2016, *available at* <https://www.finra.org/investors/insights/unraveling-mystery-over-counter-trading> (last accessed on December 28, 2021)

<sup>27</sup> *See, e.g.*, Association for Financial Markets in Europe, “Post Trade Explained -The Role of Post-Trade Services in the Financial Sector,” February 2015, Appendix 2 – Trade Confirmation; *see also* U.S. Securities and Exchange Commission, “Investor Bulletin: How to Read Confirmation Statements,” September 27, 2012, *available at* <https://www.investor.gov/introduction-investing/general-resources/news-alerts/alerts-bulletins/investor-bulletins-62> (last accessed on December 28, 2021) (explaining “What is a Confirmation Statement?”)



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of DKK 42.5 and not by the stock's price (unknown at the trade execution) at the time of the trade settlement.

37. Investors buying stocks don't need to wait for trades to settle before selling them, and *vice versa*. For example, high-frequency traders ("HFT") buy stocks and sell them almost immediately and trade several times a day.<sup>28</sup>
38. The Analyzed Transactions, which involved stocks listed on the Copenhagen Exchange,<sup>29</sup> were executed OTC by an executing broker.<sup>30</sup> Following the execution, the executing broker provided a trade confirmation that detailed, among other things, the symbol of security traded, whether the trade was a buy or sell, the number of shares traded, and the price at which the trade occurred. The stock trade confirmations for the Plans did not identify the counterparty to the trade (*i.e.*, the seller of the shares).<sup>31</sup>

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<sup>28</sup> See, e.g., Benos, Evangelos and Satchit Sagade, "High-frequency Trading Behaviour and its Impact on Market Quality: Evidence from the UK Equity Market," Working Paper No. 469, December 2012 (last accessed on December 30, 2021), p. ii noting "Although there is no precise definition of an 'HFT', the term is commonly used to describe firms that use computers to trade at high speeds and who also tend to end the day flat, *i.e.*, carry small or no overnight positions."

<sup>29</sup> Both the stocks (*i.e.*, MAERSKB and Chr. Hansen) were listed on Copenhagen stock exchange. See **Exhibit 8** for the Bloomberg, L.P. screenshot.

Exchange listing means that the companies complied with the listing requirements of the exchange. The prices of the shares were quoted on the exchange and investors could trade the shares on the exchange. See, e.g., U.S. Securities and Exchange Commission, "Listing Standards," *available at* <https://www.investor.gov/introduction-investing/investing-basics/glossary/listing-standards> (last accessed on December 28, 2021) ("Before a company's stock can begin trading on an exchange, the company must meet certain minimum financial and non-financial requirements, or 'initial listing standards.' Initial listing standards generally include a company's total market value and stock price, and the number of publicly traded shares and shareholders of the company. Once listed on an exchange, a company must continue to meet a [*sic*] various financial and non-financial requirements, or 'continued listing standards.' Continued listing standards are similar to initial listing standards, but may include additional requirements. If a company fails to meet these continued listing standards, the exchange may remove or 'delist' the company's stock from the exchange.")

<sup>30</sup> MPSKAT0007750; MPSKAT00085149; MPSKAT00077295; MPSKAT00085222-3; PROPPACIF00001323-4; PROPPACIF00001383-4; PROPPACIF00001317; PROPPACIF00001373.

<sup>31</sup> MPSKAT00077418-9 at MPSKAT00077419; MPSKAT00085289; PROPPACIF00001327; PROPPACIF00001396.

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39. The Plans used separate executing and clearing brokers for the stock trades. Post execution, the executing broker “gave up” the stock trades to a different broker for clearance and settlement pursuant to the parties’ give-up agreement.
40. Under a give-up agreement, an executing broker executes a trade as directed by an investor and “gives up” the trades to the designated clearing broker for various post-execution services (*e.g.*, clearing, settlement, record-keeping, etc.).
41. Give-up arrangements are common.<sup>32</sup> The give-up agreements that the Plans used in the Analyzed Transactions followed the standard industry template.<sup>33</sup>

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<sup>32</sup> For example, their use in connection with trades of equity securities in the U.S has been recognized by FINRA. *See* FINRA, “Trade Reporting Frequently Asked Questions,” *available at* <https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq> (last accessed on December 28, 2021) (“A member may agree to allow another member to report and lock-in trades on its behalf to a TRF [Trade Reporting Facility], the ADF [Alternative Display Facility] or the ORF [Over-the-counter Reporting Facility], provided that both parties have executed an agreement to that effect (a ‘give-up agreement’) in the form specified by FINRA (FINRA Transparency Services Uniform Reporting Agreement), and submitted such agreement to the FINRA Facility (or Facilities) to which the ‘give-up’ or ‘on behalf of’ relationship applies.”)

*See also* FIA, “Industry Addresses Inefficiencies in the Give-Up Process,” *Futures Industry*, July/August 2006, p. 30, *available at* [https://secure.fia.org/downloads/fimag/2006/julaug06/jul-aug06\\_giveups.pdf](https://secure.fia.org/downloads/fimag/2006/julaug06/jul-aug06_giveups.pdf) (last accessed on December 17, 2021) (last accessed on December 17, 2021) (“The practice of give-ups—when a customer elects to execute a trade at one firm and clear it at another firm—has become an increasingly common practice in the futures industry over the past 10 years.”)

<sup>33</sup> The give-up agreements followed the FIA template “International Uniform Brokerage Execution Services (“Give-Up”) Agreement: Trader Version 2008” *available at* [https://www.fiadocumentation.org/fia/attachment\\_dw.action?attkey=FRbANEucS95NMLRN47z%2BeeOgEFCt8EGQJsWJiCH2WAUTleh6%2BAJHrgdjuJ7MHJju&nav=FRbANEucS95NMLRN47z%2BeeOgEFCt8EGQ2r3qtn6CZtU%3D&attdocparam=pB7HEsg%2FZ312Bk8OluOIH1c%2BY4beLEAektxndL8Rf%2Bo%3D&fromContentView=1](https://www.fiadocumentation.org/fia/attachment_dw.action?attkey=FRbANEucS95NMLRN47z%2BeeOgEFCt8EGQJsWJiCH2WAUTleh6%2BAJHrgdjuJ7MHJju&nav=FRbANEucS95NMLRN47z%2BeeOgEFCt8EGQ2r3qtn6CZtU%3D&attdocparam=pB7HEsg%2FZ312Bk8OluOIH1c%2BY4beLEAektxndL8Rf%2Bo%3D&fromContentView=1).

The difference between the language in the template and the executed agreement is that the template provides for the possibility of a trader trading on behalf of a customer or multiple customers (*e.g.*, a fund manager doing trading on behalf of one or more pension plan). Solo did not need to use the trader related language because the pension plan (*i.e.*, customer) was directly instructing executing broker. I provide a comparison of the template with the executed give-up agreement as **Exhibit 9**.

I was provided only with the give up agreement that the RJM Plan signed. (MPSKAT00066947-51). The email communications related to the stock sale and purchase by the Proper Pacific Plan suggest that the plan executed a give-up agreement following the same template, *i.e.*, “International Uniform Brokerage Execution Services (“Give-Up”) Agreement: Trader Version 2008.” PROPPACIF00001317; PROPPACIF00001373.

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42. The give-up agreement<sup>34</sup> entered into by the RJM Plan as the customer, Solo Capital as the clearing broker,<sup>35</sup> and FGC Securities LLC<sup>36</sup> as the executing broker provided, among other things, that FGC Securities LLC would:
- a. Execute orders on behalf of the RJM Plan and give up the executed trades to Solo Capital for clearing;<sup>37</sup> and
  - b. Charge “¼ of a basis point on notional” of any stock for its execution services.<sup>38</sup> (This means that if RJM Plan asked FGC to buy or sell the stock with a value of \$1 million, the Plan would pay a \$25 transaction cost.)<sup>39</sup>
43. Order placement, execution, and the give up of the stock purchase executed by the executing broker to the clearing broker are demonstrated by the following example related to MAERSKB stock:
- a. On April 11, 2013, the RJM Plan contacted FGC Securities LLC and requested “liquidity” for a purchase of 10,400 shares of MAERSKB,<sup>40</sup> which in industry jargon means that the RJM Plan wanted FGC Securities to find a counterparty (or combination of counterparties) to sell 10,400 shares of MAERSKB to it. As shown in the email request, the RJM Plan’s order specified the stock’s ISIN (a unique identifier for the

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<sup>34</sup> MPSKAT00066947-51.

<sup>35</sup> *Id.* at MPSKAT00066947.

<sup>36</sup> FGC Securities, *available at* <http://www.fgcsecurities.com> (last accessed on December 19, 2021) (“FGC provides agency-only brokerage services to a broad range of institutional clients. As an independent partnership operating in an increasingly consolidated competitive landscape, FGC strives to set itself apart by providing superior client service and market liquidity.”)

<sup>37</sup> MPSKAT00066947-51 at MPSKAT00066947. The give-up agreement for the RJM Plan allowed Solo Capital to not “accept a trade transmitted to it by Executing Broker.” This is standard language available in the give up agreement template, which states that “[i]n the event that Clearing Broker does not, for any reason, accept a trade transmitted to it by Executing Broker, Clearing Broker shall promptly notify Customer and Executing Broker of such non-acceptance.”

<sup>38</sup> MPSKAT00066947-51 at MPSKAT00066951.

<sup>39</sup> One basis point equals 1/100<sup>th</sup> of 1 percent. Thus, 1 basis point of \$1 million will be \$100, and, therefore, ¼ basis point of \$1 million will be \$25.

<sup>40</sup> MPSKAT00076964.

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security)<sup>41</sup>, the number of shares it wanted to purchase, the price at which it was willing to trade, and indicated that it wanted to purchase the shares that day and settle on April 17, 2013.<sup>42</sup>

- b. In response, FGC Securities LLC confirmed that it had liquidity or a counterparty to the trade and stated that it would “execute upon approval from clearer.”<sup>43</sup> The RJM Plan responded that it would seek approval from Solo Capital.<sup>44</sup>
- c. Next, Solo Capital acknowledged to the RJM Plan that it had received the trade request.<sup>45</sup> In a separate email to the RJM Plan and copying FGC Securities LLC, Solo Capital approved the trade under the give-up agreement and stated that it would perform clearing services post-execution.<sup>46</sup>
- d. FGC Securities LLC sent the RJM Plan a confirmation of the executed stock trade, dated the same day.<sup>47</sup>
- e. After the execution, FGC Securities LLC gave up the trade to Solo Capital for post-trade execution services. These services, discussed below, are operational in nature and generally occur after the trade date. The execution resulted in a book entry reflecting a position in the shares in the Plan’s account at Solo Capital. For example, the RJM Plan’s next monthly statement identified the purchase of 10,400 shares of MAERSKB made on April 11, 2013.<sup>48</sup> Consistent with the trade

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<sup>41</sup> A unique identifier is useful for ensuring the correct security is identified because sometimes a company has multiple classes of shares trading.

<sup>42</sup> MPSKAT00076964.

<sup>43</sup> MPSKAT00077050.

<sup>44</sup> MPSKAT00077088.

<sup>45</sup> MPSKAT00077090.

<sup>46</sup> MPSKAT00077295.

<sup>47</sup> MPSKAT00077418-419 at 419.

<sup>48</sup> JHVM\_0005813-5830 at 5814.

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confirmation, the account statement shows only the RJM Plan's side of the trade, not that of any counterparty.

**B. Post-Stock Trade Execution Clearance and Settlement**

44. Following execution, a trade is cleared and settled. For example, Solo Capital provided clearing, settlement, and custody services for the RJM Plan, and Old Park Lane Capital Limited provided clearing, settlement, and custody services for the Proper Pacific Plan.<sup>49</sup>
45. Clearing refers to the set of steps involved in validating the transaction and preparing executed trades for settlement. Clearing involves, among other things, confirming the details of the transaction between buyers and sellers (*e.g.*, security identifier, side of each party (buy or sell), trade price, trade quantity, and settlement date).<sup>50</sup>
46. After clearing, a trade is settled. Settlement refers to the delivery of securities from the seller to the buyer, and the delivery of cash due, if any, on the transaction from the buyer to the seller.<sup>51</sup>

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<sup>49</sup> I note that both firms were registered with the regulator the Financial Conduct Authority ("FCA") at the time of the Analyzed Transactions, and as such were subject to its handbook of rules and guidance, particularly as it applied to broker-dealers and custodians. *See* FCA, "The Financial Services Register," *available at* <https://register.fca.org.uk/s/firm?id=001b000000NMaQQAAT> and <https://register.fca.org.uk/s/firm?id=001b000000MgBgIAAV> (last accessed December 29, 2021).

<sup>50</sup> *See, e.g.*, Danmarks Nationalbank, "Assessment of the VP Settlement System," March 2012, p.11 noting "Clearing is the process that takes place between trading and settlement. It includes a number of processes such as trade reporting, matching of terms, etc." *available at* [https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system\\_2012.pdf](https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system_2012.pdf) (last accessed on December 17, 2021).

<sup>51</sup> *See, e.g.*, Danmarks Nationalbank, The VP System, *available at* [https://www.nationalbanken.dk/en/bankingandpayments/securities\\_trade\\_settlement/Pages/The-VP-System.aspx](https://www.nationalbanken.dk/en/bankingandpayments/securities_trade_settlement/Pages/The-VP-System.aspx) (last accessed December 29, 2021) explaining ("A core element of the VP settlement system is the simultaneous exchange of securities and cash, known as Delivery versus Payment (DvP). The DvP principle ensures that a party to a securities transaction does not deliver its part of the transaction without receiving the other part.")

"Furthermore, securities may be transferred free of payment (FOP), which applies to unilateral transfers between VP accounts. However, VP's clearing members make only limited use of this facility as more than 98% of all trades among them are settled on a DvP basis." *See*, Danmarks Nationalbank, "Review of VP Securities Services in relation to Recommendations for Securities Settlement Systems," September 30, 2004, p. 26, *available at* [https://www.finanstilsynet.dk/upload/finanstilsynet/mediafiles/newdoc/rapporter/4/assessment\\_rapport\\_eng.pdf](https://www.finanstilsynet.dk/upload/finanstilsynet/mediafiles/newdoc/rapporter/4/assessment_rapport_eng.pdf) (last accessed on December 17, 2021).

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47. Together, clearing and settlement form a process that ensures that sellers get payment for the sold securities and buyers get delivery of the purchased securities.
48. For trades executed on an exchange, regulators determine a trade's settlement date.<sup>52</sup> Prior to September 17, 2014, trades executed on an EU exchange settled on the third trading day after the trade date, known as "T+3," where T refers to the trade date.<sup>53</sup> As of October 6, 2014, trades executed on an EU exchange settled on the second trading day after the trade date, or T+2.<sup>54</sup>
49. Parties that trade stock OTC (or brokers acting on their behalf) may choose their settlement date, and can choose to settle before, on, or after the settlement date applicable to trades executed on an exchange.<sup>55</sup>
50. The parties' choice of settlement date could be the function of various factors. For example, the purchaser may want a longer settlement time in order to have more time to secure any necessary financing of the trade. In fact, the settlement time can

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<sup>52</sup> See, e.g., U.S. Securities and Exchange Commission, "SEC Adopts T+2 Settlement Cycle for Securities Transactions," *available at* <https://www.sec.gov/news/press-release/2017-68-0> (last accessed on December 17, 2021).

<sup>53</sup> Danmarks Nationalbank, "Review of VP Securities Services in relation to Recommendations for Securities Settlement Systems," September 30, 2004, p. 11, *available at* [https://www.finanstilsynet.dk/upload/finansstilsynet/mediafiles/newdoc/rapporter/4/assessment\\_rapport\\_eng.pdf](https://www.finanstilsynet.dk/upload/finansstilsynet/mediafiles/newdoc/rapporter/4/assessment_rapport_eng.pdf) (last accessed on December 17, 2021). See also Danmarks Nationalbank, "Assessment of the V.P. Settlement System," March 2012, p. 12, *available at* [https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system\\_2012.pdf](https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system_2012.pdf) (last accessed on December 17, 2021).

<sup>54</sup> International Capital Market Association, "CSDR: Migration to T+2," *available at* <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/market-infrastructure/past-initiatives/csd-migration-to-t-2/> (last accessed on December 17, 2021).

<sup>55</sup> See, e.g., RBC Investor & Treasury Services, "Market Profiles: Denmark," *available at* <https://www.rbcits.com/en/gmi/global-custody/market-profiles/market.page?dcr=templatedata/globalcustody/marketprofiles/data/denmark> (last accessed on December 17, 2021), listing the "Settlement Cycle" for OTC as "Upon agreement."

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vary quite a bit. In Denmark, a trade can settle the day it is made or up to 365 days post-trade.<sup>56</sup>

51. As noted above, the RJM Plan specified the settlement date for its MAERSKB equity trade to be April 17, 2013, which was four trading days after the trade execution date of April 11, 2013.<sup>57</sup> In the industry jargon, this would be called a T+4 settlement.
52. In sum, the economic claim of the investor to the benefit/risk of the stock it purchased begins on the trade date, and therefore book entry made by the broker showed the trade on the execution date, *e.g.*, April 11, 2013, for the MAERSKB stock trade, and not on the settlement date, and this is reflected in the investor's account.

**C. Custody**

53. "Custody is, in essence, a service consisting in holding (and normally administering) securities on behalf of third parties."<sup>58</sup> A broker providing custody services is called

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<sup>56</sup> VP Securities ("VP"), the Denmark CSD, allows for settlement periods up to 365 days. Danmarks Nationalbank, "Assessment of the V.P. Settlement System," March 2012, p. 12, *available at* [https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system\\_2012.pdf](https://www.nationalbanken.dk/en/publications/Documents/2012/04/Assesment%20of%20the%20VP%20settlement%20system_2012.pdf) (last accessed on December 17, 2021). *See also* Danmarks Nationalbank, "Review of VP Securities Services in relation to Recommendations for Securities Settlement Systems," September 30, 2004, p. 11, *available at* [https://www.finanstilsynet.dk/upload/finanstilsynet/mediafiles/newdoc/rapporter/4/assessment\\_rapport\\_eng.pdf](https://www.finanstilsynet.dk/upload/finanstilsynet/mediafiles/newdoc/rapporter/4/assessment_rapport_eng.pdf) (last accessed on December 17, 2021). Danmarks National Bank is an overseer of Denmark payment and settlement systems. (Danmarks Nationalbank, "Assessment of the V.P. Settlement System," March 2012, p. 4).

VP is now owned by Euronext and known as Euronext Securities Copenhagen. *See* Euronext Securities, "Euronext Securities – a New Brand for Euronext CSDs," November 12, 2021, *available at* <https://www.vp.dk/News-and-Insights/News-List/2021/11/Euronext-Securities---a-new-brand-for-Euronext-CSDs> (last accessed on December 17, 2021).

<sup>57</sup> MPSKAT00076964.

<sup>58</sup> Chan, Diana, Fontan, Florence, Rosati, Simonetta, and Russo, Daniela, "The Securities Custody Industry," European Central Bank Occasional Paper Series No. 68, August 2007, p. 4.



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a custodian. “Custodians are first and foremost responsible for safekeeping the assets in their clients’ securities accounts.”<sup>59</sup>

54. As part of this function, custodians “provide their clients with reports about their cash and securities holdings and transactional activities, which can be tailored or customized for specific client purposes, including for monitoring the financial performance of securities and other assets.”<sup>60</sup> These reports may be provided to the clients in hard copy or electronically.
55. With regard to the Analyzed Transactions the RJM Plan and the Proper Pacific Plan custodied their stock holdings at Solo Capital and Old Park Lane, respectively.<sup>61</sup> For example, the MAERSKB stock purchased by the RJM Plan was reflected in its stock holdings on its April 2013 account statement from Solo Capital.<sup>62</sup>
56. The RJM Plan exited (or “unwound”) its position in MAERSKB stock in June 2013, with the sale executed by FGC Securities LLC and cleared by Solo Capital, again according to the give-up agreement between the two.<sup>63</sup>

**D. Central Securities Depository**

57. Securities settlements may involve a CSD, which is an institution that “immobilize[s] securities” and “enable[s] the transfer of title by book-entry,” and may offer other services including “income collection from issuers and distribution

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<sup>59</sup> The Clearing House, “The Custody Services of Banks,” July 2016, pp. 4-5, *available at* [https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728\\_tch\\_white\\_paper\\_the\\_custody\\_services\\_of\\_banks.pdf](https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728_tch_white_paper_the_custody_services_of_banks.pdf) (last accessed on December 17, 2021).

<sup>60</sup> *Id.* at 5.

<sup>61</sup> *See, e.g.*, Client Custody Agreement between Solo Capital Partners LLP and RJM Capital Pension Plan, 2013 (MPSKAT00003776-84); Client Custody Agreement between Solo Capital Partners LLP and RJM Capital LLC Pension Plan, 2014 (MPSKAT00104151-72); Old Park Lane Capital Limited Terms and Conditions for Custody Services, October 2015 (PROPPACIF00000784-816); *see also* the April 2013 Solo Capital statement for the RJM Plan showing the MAERSKB stock purchase (JHVM\_0005813-58130 at 5815) and the 2014 Old Park Lane statement for the Proper Pacific Plan showing the Chr. Hansen stock purchase (PROPPACIF00000955-61 at PROPPACIF00000956).

<sup>62</sup> JHVM\_0005813-58130 at 5815.

<sup>63</sup> MPSKAT00085109; MPSKAT00085149; MPSKAT00085175-76; MPSKAT00085178; MPSKAT00085222-3; MPSKAT00085288; MPSKAT00085289.



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to securities holders” and securities lending.<sup>64</sup> CSDs have participants or members that use their services.

58. CSDs typically follow a book-entry system for record-keeping and, therefore, can easily transfer securities between their participants electronically.<sup>65</sup> This allows a dematerialized system (meaning, a system without physical stock certificates) to work and enables custodians that interact with CSDs to maintain custody of their clients’ securities in book-entry format.

59. A CSD may offer multiple types of accounts to its participants for different types of securities holdings. For example, a CSD might offer:

a. An omnibus account, which is “[a] securities account in which the securities belong to multiple clients of a CSD participant, including or excluding a CSD participant’s own securities,”<sup>66</sup>

b. A segregated account, which can:

*“- Be a fully separate account from the other accounts of the CSD participant or be a subaccount of the CSD participant;*

*- Be opened in the name of a single client or in the name of the CSD participant (who might give the account any denomination it chooses);*

*- Include securities belonging to a single end investor (end investor account) or to multiple end investors (individual client account), depending on whether the single client of the CSD participant is itself holding securities on behalf of others.”<sup>67</sup>*

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<sup>64</sup> Chan, Diana, Fontan, Florence, Rosati, Simonetta, and Russo, Daniela, “The Securities Custody Industry,” European Central Bank Occasional Paper Series No. 68, August 2007, p. 8.

<sup>65</sup> Euronext Securities, “How to Become a Customer,” *available at* <https://www.vp.dk/Legal-Framework/How-To-Become-a-Customer> (last accessed on December 17, 2021) (“As a Danish CSD, VP Securities offers an entire range of services regarding securities such as issuance, shareholder identification and investor services. **And of course we provide our core activity of operating a book-entry system and a securities settlement system.**”) (emphasis added).

<sup>66</sup> European Central Securities Depositories Association, “Account Segregation Practices at European CSDs,” October 13, 2015, pp. 6-8, *available at* [https://ecdsa.eu/wp-content/uploads/2015\\_10\\_13\\_ECSDA\\_Segregation\\_Report.pdf](https://ecdsa.eu/wp-content/uploads/2015_10_13_ECSDA_Segregation_Report.pdf) (last accessed on December 17, 2021).

<sup>67</sup> *Id.*

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60. In the case of VP, foreign custodians holding shares of Danish companies typically use omnibus accounts.<sup>68</sup> These custodians may be either direct participants in VP, with their own omnibus accounts at VP, or indirect participants, where their holdings are reflected in the omnibus account of another custodian. By contrast, segregated or end-investor accounts are the default for domestic investors because “the law foresees the use of end investor accounts as standard practice, requiring financial intermediaries to obtain prior express written consent from end investors in order to hold client assets in an omnibus account.”<sup>69</sup>

**E. U.K Custodians of Danish Securities**

61. As I explained above, the Analyzed Transactions used U.K.-based custodians (specifically, Solo Capital for the RJM Plan and Old Park Lane for the Proper Pacific Plan) that provided settlement and custody services for Danish stocks. Here, I briefly describe some of the features of custodianship in the U.K.
62. In the U.K., domestic investors can have individually segregated accounts or a pooled account in their broker’s name.<sup>70</sup> This is in contrast to the system in Denmark, where there is more transparency around security ownership due to domestic investors typically having individually segregated accounts at VP.
63. For U.K. investors that hold shares in U.K. companies at an account maintained by a U.K. custodian, there are several intermediaries in the custody chain between the investor and the local CSD.<sup>71</sup> For clients of U.K. custodians investing in securities

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<sup>68</sup> IMF, “Denmark: Financial Sector Assessment Program—Detailed Assessment of the Securities Clearance and Settlement Systems,” March 2007, pp. 7-8; Danmarks Nationalbank, “Assessment of VP Securities,” April 2016, p. 15, *available at* [https://www.nationalbanken.dk/en/publications/Documents/2016/03/Assessment\\_of\\_VP\\_securities\\_april\\_2016.pdf](https://www.nationalbanken.dk/en/publications/Documents/2016/03/Assessment_of_VP_securities_april_2016.pdf) (last accessed on December 17, 2021).

<sup>69</sup> European Central Depositories Association, “Account Segregation Practices at European CSDs,” October 13, 2015, p. 14, *available at* [https://ecsda.eu/wp-content/uploads/2015\\_10\\_13\\_ECSDA\\_Segregation\\_Report.pdf](https://ecsda.eu/wp-content/uploads/2015_10_13_ECSDA_Segregation_Report.pdf) (last accessed on December 17, 2021).

<sup>70</sup> Department for Business Innovation & Skills, “Exploring the Intermediated Shareholding Model,” NIS Research Paper Number 261, January 2016, p. 25, *available at* [https://www.uksa.org.uk/sites/default/files/BIS\\_RP261.pdf](https://www.uksa.org.uk/sites/default/files/BIS_RP261.pdf) (last accessed on December 17, 2021).

<sup>71</sup> *Id.* at 92.

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issued by foreign companies, the chain of custody will increase in complexity as it may include additional sub-custodians and will include the foreign CSD (also referred to below as the local CSD, since local to the issuer).<sup>72</sup> Sub-custodians are custody account providers that have accounts with the local CSDs, thereby adding additional links to the chain of custody.<sup>73</sup> A customer's custodian often will maintain an omnibus account with the sub-custodian, and, therefore, for any given security, the omnibus account will show net position across all the custodian's clients covered by the omnibus account. The same is true for a sub-custodian maintaining an omnibus account with a CSD.

64. VP keeps a record of all the shares issued and outstanding in each company. However, records at a CSD like VP are unlikely to accurately reflect all the investors that hold a given security as of a given date. There are several reasons for this, including the time it takes for VP to record a transfer of ownership associated with a stock trade (since that is recorded at VP as of settlement date, not trade date), and the use of sub-custodians and omnibus accounts at VP.<sup>74</sup> For example, Danish stock shares held by a foreign investor that is a customer of a U.K. broker that, in turn, has an account with the JP Morgan affiliate that is a direct participant in VP may appear in VP's records as being held in the name of JP Morgan in its omnibus account at VP.
65. As part of the settlement process, a custodian may need to interact with another custodian to transfer securities. The interaction between two custodians may be through yet another custodian (where both interacting custodians have accounts) or through a CSD, which allows for easy interaction and intermediation among its participants.

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<sup>72</sup> *Id.* at 86, 92.

<sup>73</sup> The Clearing House, "The Custody Services of Banks," July 2016, pp. 13-14, *available at* [https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728\\_tch\\_white\\_paper\\_the\\_custody\\_services\\_of\\_banks.pdf](https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728_tch_white_paper_the_custody_services_of_banks.pdf) (last accessed on December 17, 2021).

<sup>74</sup> Another reason is the use of securities lending, where shares are lent from one party to another. This practice is discussed in §V.

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66. The primary role of the custodian closest to a customer is to store the digital records of the customer's asset holdings. Other services offered by the custodian may include investment accounting, performance measurement, asset-liability monitoring, stock lending, derivatives services, and currency hedging.<sup>75</sup>

**IV. HEDGING STOCK POSITIONS VIA FLEX FUTURES AND FORWARD CONTRACTS**

67. In the Analyzed Transactions, on the same day as the stock purchase, the Plans entered into either flex futures (applicable to the RJM Plan) or forward contracts (applicable to the Proper Pacific Plan) that hedged the risk arising from fluctuations in prices of the Danish stocks they purchased.

**A. How Futures and Forwards Hedge Price Risk Of Stock Position**

68. Both flex futures and forwards are contracts widely used by investors and taught in finance textbooks.<sup>76</sup> They are commonly referred to as “derivatives” because their value is derived from the value of the underlying assets. These contracts allow investors to hedge risk, such as the risk from, among other things, the fluctuations in the price of various assets, *e.g.*, price of oil, foreign exchange, stock indices, or a particular stock.<sup>77</sup>
69. Flex futures and forward contracts are both agreements to buy or sell a specified asset (here, Danish stock) at a specified price on a specified future date called the “maturity date” or “at maturity”).<sup>78</sup> Such contracts involve two parties, with one

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<sup>75</sup> Department for Business Innovation & Skills, “Exploring the Intermediated Shareholding Model,” NIS Research Paper Number 261, January 2016, p. 93, *available at* [https://www.uksa.org.uk/sites/default/files/BIS\\_RP261.pdf](https://www.uksa.org.uk/sites/default/files/BIS_RP261.pdf) (last accessed on December 17, 2021).

<sup>76</sup> Hull, John C. “Options, Futures, and Other Derivatives,” Eighth Edition, *Prentice Hall*, 2012 (“Hull”), p.1 (“In the last 30 years, derivatives have become increasingly important in finance. Futures and options are actively traded on many exchanges throughout the world. Many different types of forward contracts, swaps, options, and other derivatives are entered into by financial institutions, fund managers, and corporate treasurers in the over-the counter market.”).

<sup>77</sup> Hull, p. 47. Although not specifically discussed in this report, other derivative products could similarly be used to hedge market risk exposure that the pension plans faced by virtue of taking a long equity position in Danish stocks.

<sup>78</sup> *Id.* at 5.

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party agreeing to buy the asset and the other party agreeing to sell the asset at maturity.<sup>79</sup>

70. It is important to note that instruments like flex futures and forwards are distinct from stock. Entering a derivative position (*e.g.*, flex futures) tied to the value of a stock does not alter the underlying long position in that stock. Thus, when the pension plans entered flex futures or forward contracts to hedge their positions, those contracts did not change the fact that they held the underlying shares.
71. Derivatives like flex futures and forward contracts trade in an OTC market.<sup>80</sup> Flex futures are cleared and settled via BClear, an NYSE Euronext platform discussed in §IV.B below. Forward transactions involve an intermediary to broker the transaction and custody the asset.
72. As I noted above, investors commonly use futures and forwards to hedge a risk they face.<sup>81</sup> For example, an investor buying shares in a stock can eliminate almost all the risk from stock price fluctuations between the acquisition date and the date on which the investor expects to sell the stock through a “short hedge” by entering into flex futures or forward contracts that allow the investor to sell those shares at a pre-determined price in the future and thereby remove the uncertainty about the sale proceeds.<sup>82</sup>
73. To understand how hedging works, I first explain the simple case of a stock that does not pay dividends. The no-arbitrage price<sup>83</sup> of a forward contract on a non-dividend

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<sup>79</sup> *Id.*

<sup>80</sup> *Id.* at 3 (“Not all trading of derivatives is done on exchanges. The over-the-counter market is an important alternative to exchanges and, measured in terms of the total volume of trading, has become much larger than the exchange-traded market.”)

<sup>81</sup> *Id.* at 47 (“Many of the participants in futures [and forward] markets are hedgers. Their aim is to use futures markets to reduce a particular risk that they face.”)

<sup>82</sup> *Id.* at 48 (“[S]hort hedge is a hedge ... that involves a short position in futures contracts. A short hedge is appropriate when the hedger already owns an asset and expects to sell it at some time in the future. For example, a short hedge could be used by a farmer who owns some hogs and knows that they will be ready for sale at the local market in two months.”)

<sup>83</sup> No arbitrage price refers to a price in which neither a flex/futures buyer nor seller can make risk free profit. *See, e.g., id.* at p. 104, §5.4.

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paying stock is the product of the current stock price (represented by  $S_0$ ), and a time value factor “TVF”).

$$F_o = S_o \text{ multiplied by TVF}$$

74. The TVF is the future value of \$1 invested (when the contract is opened) at the applicable interest rate until maturity.<sup>84</sup> Therefore, when a flex futures or forward contract is opened, the TVF is greater than 1 because \$1 will earn some interest until the maturity. For example, if the interest earned is \$0.01, the TVF will be 1.01, and will result in a contract price that is slightly higher than the current price of the underlying stock.<sup>85</sup> When the interest rates are low, as was the case for the Analyzed Transactions, the interest earned is very small and therefore, TVF is almost 1 for the entire life of the contract and can be ignored for practical purposes.
75. Thus, the value of a forward or flex futures contract for Analyzed Transactions at any time was primarily determined by the stock price at the time. In other words, as the stock price went up, the value of the flex futures or forward contracts went up by almost the same amount.
76. In short, if an investor sells a forward contract as a hedge while entering into a long position in the stock, any gain on the stock position will be almost entirely offset by the losses on the forward contract sold to hedge the stock position. For example, consider an investor that buys shares of a non-dividend paying stock and sells forward contracts to hedge the price risk. If the price of the stock increased by \$2, the forward price will also go up almost by \$2.
77. The hedging works similarly for a dividend-paying stock. However, the no-arbitrage price for a flex futures or forward contract for a dividend paying stock opened before an ex-dividend date and with a maturity date after ex-dividend date is calculated differently to account for the fact that the stock holder as of the open date expects to

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<sup>84</sup> *Id.* at p. 104, equation 5.1 for a formula for calculating a TVF.

<sup>85</sup> The difference is known as the basis and prior to maturity, the basis is generally not zero and causes the hedging to be slightly imperfect if the forward/ futures contract is unwound prior to its maturity date. *See, e.g.,* Hull, p. 53, Figure 3.1.

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receive income related to the dividend amount but the contract purchaser does not.<sup>86</sup> Starting with the ex-dividend date, a flex futures or forward contracts will have the no-arbitrage price described earlier (*i.e.*, almost same as the stock price) because an investor buying shares on an ex-dividend date or later typically does not receive any income related to dividends.<sup>87</sup>

**B. Mechanics of Flex Futures and Forwards**

78. Often, when two parties enter into a flex futures or forward contract, no cash changes hand when the contract is opened (*i.e.*, neither the buyer in the contract pays any amount, nor the seller in the contract receives any payment).<sup>88</sup>
79. After the contract opening date, as discussed earlier, the value of the contract changes as the price of the underlying asset (*e.g.*, the stock price) fluctuates.<sup>89</sup>
80. Depending on the change in the market price of the underlying asset on the unwind (or the maturity) date and number of the contracts, one party can incur significant gains or losses when the contract is unwound (or matures).<sup>90</sup>
81. A flex futures contract mitigates the risk of counterparty non-performance by using a clearing house as an intermediary, which “guarantees the performance of the parties to each transaction.”<sup>91</sup> A clearing house facilitates trading only among its members.

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<sup>86</sup> See, *e.g.*, *id.* at 107, equation 5.2 for the situation with no taxes. The formula for the calculation of no arbitrage price for a forward contract under taxes is much more complex. See, *e.g.*, Cornell, Bradford, and Kenneth R. French, “Taxes and the Pricing of Stock Index Futures,” *The Journal of Finance*, 1983, 38(3), pp. 675-694, discussion starting at p. 681.

<sup>87</sup> Sometimes, a company may announce a special dividend payable on or after the ex-dividend date but before the contract maturity. My statement is applicable to the situation when there is no such payment.

<sup>88</sup> Hull, p. 8 noting “it costs nothing to enter into a forward contract.”

<sup>89</sup> A flex futures or forward contract may specify a physical settlement. In that case, on maturity, the seller must deliver the asset (*e.g.*, stock shares) to the buyer and receive payment for the sale at the price agreed upon at the contract’s start.

<sup>90</sup> Investors do not always hold a contract to maturity. For example, an investor entering into a contract that specifies physical delivery of underlying asset on the maturity date may enter into an offsetting contract at an earlier date and unwind their position to avoid having to deliver or take delivery of the asset. See, *e.g.*, Hull, p. 36 noting “To avoid the risk of having to take delivery, an investor with a long position should close out his or her contracts prior to the first notice day.”

<sup>91</sup> Hull, p. 29.



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Therefore, a party wanting to access a clearing house must do so through one of the members.<sup>92</sup>

82. For example, BCclear, an NYSE-Euronext offering, offers intermediary services related to flex futures in Europe.<sup>93</sup> As of June 2014, BCclear was the largest provider of flexible futures products and provided clearing services for, among other things, flexible futures contracts on individual stocks (“flex futures”) for which parties had the ability to negotiate, among other things, exercise price.<sup>94</sup>
83. Like stock trades, the custody services for flex futures sold by the RJM Plan were provided by Solo Capital.<sup>95</sup> Solo Capital accessed BCclear through JP Morgan Chase<sup>96</sup> because “[f]irms wishing to access the [BCclear] system either have to be a

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<sup>92</sup> Hull, p. 29 noting that “[t]he clearing house has a number of members, who must post funds with the clearing house. Brokers who are not members themselves must channel their business through a member. The main task of the clearing house is to keep track of all the transactions that take place during a day, so that it can calculate the net position of each of its members.” (emphasis added)

<sup>93</sup> Euronext, “NYSE LIFFE’s BCLEAR Service Registers One Billionth Contract,” March 9, 2011, *available at* <https://www.euronext.com/en/about/media/euronext-press-releases/nyse-liffes-bclear-service-registers-one-billionth-contract> (last accessed on December 17, 2021), noting “Bclear was launched in October 2005 after NYSE Liffe first identified customers’ needs for a flexible platform for the processing of pre-negotiated equity derivatives transactions. The service was designed to bridge the gap between the bilateral, OTC markets and the listed on-exchange markets, **providing traditional users of the OTC markets with the security of trade administration and clearing of a range of options and futures on individual equity and index contracts.**” (emphasis added)

<sup>94</sup> ISDA, “Central Clearing in the Equity Derivatives Market – An ISDA Study,” June 2014, p. 4, *available at* <https://www.isda.org/a/6PDDE/central-clearing-in-the-eqd-market-final.pdf> (last accessed on December 17, 2021), noting “ESMA also states that equity derivatives contracts traded on multilateral trading facilities (MTFs), such as futures and options, are classified as OTC derivatives under EMIR.”

*See also* ISDA, “Central Clearing in the Equity Derivatives Market – An ISDA Study,” June 2014, p. 7, *available at* <https://www.isda.org/a/6PDDE/central-clearing-in-the-eqd-market-final.pdf> (last accessed on December 17, 2021), explaining “Cleared, flexible exchange-like contracts closely resemble exchange-traded products, **except that market participants are able to bilaterally negotiate a limited number of terms, such as contract maturity, exercise price and settlement method.** Once the terms are agreed, the contracts are sent to an exchange or CCP for confirmation, processing and clearing.” (emphasis added)

<sup>95</sup> *See* Client Custody Agreement between Solo Capital Partners LLP and RJM Capital LLC Pension Plan, 2013 (MPSKAT00003776-84); Client Custody Agreement between Solo Capital Partners LLP and RJM Capital LLC Pension Plan, 2014 (MPSKAT00104151-72).

<sup>96</sup> *See* various monthly JP Morgan Chase statements for Solo Capital (SCPADMINISTRATORS\_00041860-2757).



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member firm of LIFFE (Euronext Liffe London) or to have a clearing agreement in place with a member firm.”<sup>97</sup>

84. Unlike flex futures, there is no intermediary involved in a forward contract and, therefore, depending on the stock price on the unwind date, the party with a gain would face credit risk as the counterparty may not honor the obligation to pay the amount required under the contract.
85. Like stock trades, the custody service for the forward contracts sold by the Proper Pacific Plan was provided by Old Park Lane.<sup>98</sup>
86. Below, I describe the flex futures contracts that the RJM Plan and the forward contracts that the Proper Pacific Plan used to hedge the stock price risk in their transactions.
87. In conjunction with the RJM Plan’s April 11, 2013 purchase of 10,400 shares of MAERSKB stock, the Plan also sold, on the same day, flex futures (on MAERSKB) through inter-dealer broker FGC Securities LLC. This sale hedged the price risk of the purchased shares. The steps below illustrate the process the RJM Plan used:
88. On April 11, 2013, the RJM Plan contacted FGC Securities LLC and requested “liquidity” for a sale of 104 contracts of MAERSKB,<sup>99</sup> which, since a “contract” is for 100 shares, represents an agreement to sell 10,400 shares at a future date. As shown in the email request, the RJM Plan’s order specified the contract expiry date,

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<sup>97</sup> IPE, “To Trade ‘On’ or ‘Off’ Exchange?,” January 2006, *available at* <https://www.ipe.com/to-trade-on-or-off-exchange/18537.article> (last accessed on December 27, 2021), also noting “Bclear is perhaps the most important development for fund managers as far as wholesale equity derivatives are concerned. It allows OTC trades to be registered, processed and cleared through LCH.Clearnet Ltd. Users can choose between standard and non-standard maturities and strike prices and they can even design multi-leg structures of combinations of American and European style options, as well as electing for either cash or physical settlement. This provides many of the most important benefits of trading on exchange to OTC players.”

<sup>98</sup> Old Park Lane Capital Limited Terms and Conditions for Custody Services, October 2015 (PROPPACIF00000784-816).

<sup>99</sup> MPSKAT00076965.

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the quantity of contracts it wanted to sell, and indicated that it wanted to trade that day.<sup>100</sup>

89. FGC Securities LLC sent the RJM Plan a confirmation of the executed trade, dated the same day.<sup>101</sup> The trade confirmation from FGC Securities LLC shows “Euronext – BCclear” as the exchange for the flex futures contracts. That is, the flex futures contracts were typical contracts for which BCclear provided the clearing services.<sup>102</sup>
90. Similarly, the trade confirmation from Bastion Capital show that Proper Pacific Plan bought 839,500 shares of Chr. Hansen stock on November 27, 2014.<sup>103</sup> Proper Pacific sold 839,500 forward contracts on the same day,<sup>104</sup> which hedged the price risk of the purchased shares, as reflected in the trade confirmations from Old Park Lane.<sup>105</sup> The process reflected in the documents is described below:
91. On November 27, 2014, the Proper Pacific Plan emailed Amalthea Enterprises Ltd. to propose selling forward contracts for 839,500 shares of Chr. Hansen with an expiry date of March 20, 2015.<sup>106</sup> Though forward contracts did not have an intermediary like BCclear to ensure that parties meet their performance obligations under the contracts, the message noted that Old Park Lane was expected to serve as Guarantor, pending approval.<sup>107</sup>
92. Amalthea Enterprises Ltd. responded that it was “[h]appy to trade at the below levels ... pending custodian approvals.”<sup>108</sup> Old Park Lane responded to the Proper Pacific

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<sup>100</sup> MPSKAT00076965.

<sup>101</sup> MPSKAT00077418-419 at MPSKAT00077418.

<sup>102</sup> MPSKAT00077418-419 at MPSKAT00077418; MPSKAT00085291.

<sup>103</sup> PROPPACIF00001317; PROPPACIF00001326; PROPPACIF00001327.

<sup>104</sup> Unlike flex futures contracts (where each contract covered 100 shares of the underlying stock), each forward contract covered only one share of the underlying stock.

<sup>105</sup> PROPPACIF00001320.

<sup>106</sup> PROPPACIF00001325.

<sup>107</sup> PROPPACIF00001325.

<sup>108</sup> PROPPACIF00001325.

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Plan to acknowledge receipt of the trade proposal.<sup>109</sup> It then sent a message to the Proper Pacific Plan, copying Amalthea Enterprises Ltd, indicating that the trade was “matched” between the two counterparties.<sup>110</sup>

93. As I noted earlier, the parties to forward or flex futures contracts can exit the contracts before the maturity date (as was the case for both Analyzed Transactions<sup>111</sup>) by entering into flex futures or forward contracts with opposite obligations (*i.e.*, enter into contracts to buy stock shares to offset the obligation to buy shares under the prior contracts). That is, the seller in flex futures or forward contracts can enter into new contracts to buy the same number of shares with the same maturity date and same delivery price.
94. For example, after selling forward contracts in November 2014, the Proper Pacific Plan purchased contracts on December 16, 2014 in order to exit the contracts that would have otherwise matured on March 20, 2015.<sup>112</sup>

**V. SECURITIES LENDING**

95. A few days after the trade execution, the pension plans lent the shares that they purchased. The stock loan term in the Analyzed Transactions started on the same day the stock trades settled, which allowed the Plans to lend the stock they purchased and pay for the purchases with the cash collateral they received in return.<sup>113</sup>

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<sup>109</sup> PROPPACIF00001319.

<sup>110</sup> PROPPACIF00001320.

<sup>111</sup> As discussed in §VIII, both the RJM Plan and the Proper Pacific Plan unwound the transaction sometime after the dividend record date and before the maturity of the hedge contracts.

<sup>112</sup> PROPPACIF00001378.

<sup>113</sup> There are multiple ways to finance a security purchase, e.g., a security lending transaction, a repurchase agreement, or a margin loan from your broker. For the Analyzed Transactions, both custodians could also “advance funds” to the plans “to facilitate the settlement of any Transaction relating to Property.” MPSKAT00003776 – 3784 at MPSKAT00003778 and PROPPACIF00000784-816 at PROPPACIF00000786.

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96. Eventually, the pension plans recalled the shares that had been lent and sold shares to exit their stock position in full.

**A. Basic Mechanics of Securities Lending**

97. Securities lending refers to the loan of a security (*e.g.*, stocks, bonds) from one party (the “lender”) to another (the “borrower”). The loan can be bilaterally negotiated between a borrower and a lender or facilitated by a broker-dealer or a dealer bank acting as an intermediary.<sup>114</sup> A loan term (“Loan Term”) refers to the period during which the parties have exchanged securities for collateral.
98. For the Loan Term, the borrower provides collateral to the lender, often in the form of cash. The lender of the securities maintains his economic exposure to the securities.<sup>115</sup> A security loan with cash collateral can be used as a financing mechanism because, from an economic perspective, the transaction is effectively a loan collateralized by the shares.<sup>116</sup>

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*See, e.g.*, SWIFT, “SFTR – The Securities Financing Transactions Regulation,” *available at* <https://www.swift.com/your-needs/capital-markets/sftr> (last accessed on December 28, 2021) (“A Securities Financing Transaction (SFT) is where securities are used to borrow, not unlike a collateralized loan. For instance, repurchase agreements (repos), buy/sell-back transactions and lending. In each of these cases ownership of the securities changes hands in exchange for cash. The SFT concludes when each counterparty receives what they originally possessed, minus (or in addition to) a fee depending on the type of transaction.”)

*See also* European Commission, “Securities Financing Transactions (SFTs),” *available at* [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/securities-financing-transactions-sfts\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/securities-financing-transactions-sfts_en) (last accessed on December 28, 2021) “A securities financing transaction can be a repurchase transaction - selling a security and agreeing to repurchase it in the future for the original sum of money plus a return for the use of that money [or] lending a security for a fee in return for a guarantee in the form of financial instruments or cash given by the borrower [or] a buy-sell back transaction or sell-buy back transaction [or] a margin lending transaction.”)

<sup>114</sup> BlackRock, “Securities Lending: The Facts,” May 2015, p. 1.

<sup>115</sup> Dixon, Peter N., Corbin A. Fox, and Eric K. Kelley, “To Own or Not to Own: Stock Loans Around Dividend Payments,” *Journal of Financial Economics*, 2021, 140(2), pp. 539-559, p. 539 noting “A stock loan decouples ownership from equity exposure. This occurs because while securities lending agreements transfer the legal right to receive dividends and any tax liability thereof from the lender to the borrower, the borrower must reimburse the lender any dividend payments that occur during the life of the loan and return the shares upon recall.”

<sup>116</sup> *See, e.g.*, Fidelity, “What is the Fully Paid Lending Program?,” *available at* <https://www.fidelity.com/trading/fully-paid-lending> (last accessed on December 28, 2021), explaining that an investor remains “exposed to the market while ... securities are on loan” and can sell the shares anytime.

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99. The borrower may sell or further lend out the shares during the Loan Term but must return the same number of shares of the same kind to the lender either at a date determined at the start of the loan or, more typically, when either party decides to end the loan.
100. The lender may use the collateral, including spending the cash collateral, during the term of the loan but must return the collateral to the borrower at a date determined at the start of the loan or, more typically, when either party decides to end the loan.
101. Securities lending transactions are commonly done pursuant to industry-standard agreements like the Global Master Securities Lending Agreement (“GMSLA”). The GMSLA, discussed in more detail below, is a template agreement that borrowers and lenders can modify to suit their needs.
102. Securities lending is widespread and extensive. As of June 30, 2015, the value of securities on loan exceeded EUR 1.8 trillion globally.<sup>117</sup> The value of securities lent in the Analyzed Transactions, at DKK 454,275,009 by the RJM Plan and DKK 217,346,550 by the Proper Pacific Plan, were very small compared to the size of the industry; each transaction value being less than 0.004% of the industry size of about EUR 1.8 trillion.<sup>118</sup>

**B. Securities Lending Promotes Market Efficiency**

103. Securities lending plays several important roles in the securities market and is widely understood to promote market efficiency and liquidity.<sup>119</sup>

*Securities lending provides **liquidity** to the equity, bond and money markets, placing it at the heart of today’s financial system. This increase in liquidity reduces the cost of trading, thereby increasing*

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<sup>117</sup> International Securities Lending Association, “ISLA Securities Lending Market Report, September 2015,” p. 6.

<sup>118</sup> The DKK amounts were converted to EUR at an assumed rate of 1 EUR per 7.4604 DKK (as of June 30, 2015, **Exhibit 10** (Bloomberg, L.P. screenshot)), for loans of EUR 60,891,508 and EUR 29,133,364.

<sup>119</sup> An efficient market is one in which prices reflect all publicly available information. *See, e.g.,* Fama, Eugene, “Efficient Capital Markets: A Review of Theory and Empirical Work,” *Journal of Finance*, 1970, 25(2), pp. 383-417. Security lending promotes market efficiency because it allows investors with a contrarian view of the current stock price to influence the stock price by borrowing the stock and selling it (*i.e.*, short selling).

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*market efficiency and benefiting all. Securities lending markets allow market participants to sell securities that they do not own in the confidence that they can be **borrowed prior to settlement**. They are also **used for financing**, through the lending of securities against cash, forming an important part of the money markets. The ability to lend and borrow securities freely underpins the services that securities dealers offer their customers and the trading strategies of dealers, hedge funds and other asset managers. On the lending side, securities lending forms a growing part of the revenue of institutional investors, custodian banks and the prime brokerage arms of investment banks.*<sup>120</sup>

104. The International Securities Lending Association (“ISLA”), a trade organization, describes the same benefits from securities lending:

*Securities lending plays a fundamental role in today’s global capital markets. It has long been used as a means of meeting settlement and collateral requirements, as well as providing vital liquidity and efficiency to secondary markets. It also promotes price discovery and market making, as well as facilitating important hedging and investment strategies, such as short selling and arbitrage. As of December 2020, total securities on loan was EUR 2.3 trillion, with EUR 24 trillion of securities being made available for securities lending by institutional investors. Many European and other central banks use securities lending as part of their implementation of monetary policy, which helps financial markets function more smoothly.*<sup>121</sup>

105. Regulators, such as the European Securities and Markets Authority (“ESMA”), an independent authority that promotes “stable and orderly financial markets,”<sup>122</sup> have

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<sup>120</sup> Faulkner, Marc C., “An Introduction to Securities Lending,” (Spitalfields Advisors Ltd., 4th ed. 2007), available at <https://www.sasla.co.za/index.php/en/document/27-an-introduction-to-securities-lending-4th-ed/file> (last accessed November 29, 2021). (emphasis added)

<sup>121</sup> ISLA - A&O, “Framing Securities Lending for the Sustainability Era,” March 2021, p. 10, available at <https://www.allenoverly.com/en-gb/global/news-and-insights/publications/framing-securities-lending-for-the-sustainability-era-isla-ao-white-paper> (last accessed on November 29, 2021).

<sup>122</sup> ESMA, “ESMA in Brief,” available at <https://www.esma.europa.eu/about-esma/esma-in-brief> (last accessed on November 28, 2021).

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also noted the efficiency of securities lending.<sup>123</sup> So has the European Central Bank.<sup>124</sup>

106. Security lending helps markets be efficient by allowing arbitrageurs to contribute to price discovery. For example, arbitrageurs can borrow securities they consider overvalued and engaged in activities such as short sales to facilitate efficient price discovery.<sup>125</sup>
107. One recent extreme example of the impact of securities being sold short, facilitated through securities lending, occurred in shares of GameStop. The short interest<sup>126</sup> in GameStop reached a high of 109.26% of outstanding shares in December 2020,<sup>127</sup> and 122.97% of the float (i.e., shares issued to the public and available for investors to trade) in January 2021.<sup>128</sup> This meant that at these peaks, all the long positions added up to 209.26% of the outstanding shares (in December 2020) and 222.97% of the float (in January 2021). In other words, long positions reflected in investor accounts and related statements exceeded the share float and shares outstanding due to short interest.

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<sup>123</sup> ESMA, “Undue Short-Term Pressure on Corporations,” December 18, 2019, *available at* <https://www.esma.europa.eu/document/report-undue-short-term-pressure-corporations-financial-sector> (last accessed on November 29, 2021) (“Furthermore, ESMA has considered the general arguments in relation to the impact of short-selling and securities lending practices and their potential link with short-termism. Nevertheless, ESMA points out that **short-selling and securities lending are key for price discovery and market liquidity**. Moreover, ESMA is not aware of concrete evidence pointing to a cause-effect connection between these practices and the existence of undue short-term market pressures.”) (emphasis added).

<sup>124</sup> See European Central Bank, “What is Securities Lending?,” December 8, 2016, *available at* [https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/securities\\_lending.en.html](https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/securities_lending.en.html) (last accessed on November 29, 2021).

<sup>125</sup> A “short sale” occurs when an investor sells securities that it does not have, intending to buy the securities at a later date when (the investor hopes) the price of the security has fallen, thereby yielding a profit. A short sale can be “covered,” meaning that shares are borrowed to effectuate settlement of the sale within the required amount of time, or “naked,” meaning that the seller fails to make delivery within the required time.

<sup>126</sup> Short interest refers to the shares sold short as a proportion of the outstanding shares or the float.

<sup>127</sup> U.S. Securities and Exchange Commission, “SEC Staff Report on Equity and Options Market Structure Conditions in Early 2021,” October 14, 2021, p. 25, *available at* <https://www.sec.gov/files/staff-report-equity-options-market-struction-conditions-early-2021.pdf> (last accessed on November 30, 2021).

<sup>128</sup> *Id.* at 21.



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108. Security lending also facilitates the smooth functioning of markets by increasing the supply of shares around periods of high demand, *e.g.*, dividend record dates.<sup>129</sup>
109. In short, security lending plays an important role in the efficient and smooth functioning of securities markets and “contributes substantially to market quality through its roles in market making, facilitating trade settlement, and short selling.”<sup>130</sup>
110. While securities lending contributes to the efficient functioning of markets, securities lending is, however, another cause of CSDs and other custodians not having accurate records of investors entitled to receive dividends at each point in time.

**C. Stock Loans in The Analyzed Transactions Were Made Pursuant to the GMSLA**

111. Securities lending typically begins with contract templates that the parties can use as a starting point for their negotiations. For cross-border transactions, for example, the GMSLA is the standard template between parties to securities lending transactions.<sup>131</sup> The GMSLA was developed by ISLA; the version developed in 2010 remains in use today.<sup>132</sup> Market participants begin with these standard agreements and negotiate any individualized terms to suit their particular circumstances.

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<sup>129</sup> Dixon, Peter N., Corbin A. Fox, and Eric K. Kelley, “To Own or Not to Own: Stock Loans Around Dividend Payments,” *Journal of Financial Economics*, 2021, 140(2), pp. 539-559, p. 540 (“Although we find a significant reduction in shares available for lending, the quantity of shares on loan and the number of new loan transactions both increase, which indicates the demand effect dominates. The magnitudes are striking. While supply contracts by an average of 10%, **the quantity of shares on loan on dividend record days surpasses its pre-dividend level by more than 20%, and the number of new lending transactions exceeds its average by well over 50%.**”) (emphasis added).

<sup>130</sup> Baklanova, Viktoria, Cecilia Caglio, Frank M. Keane, and R. Burt Porter, “A pilot survey of agent securities lending activity,” OFR WP (2016): 16-08, [“Baklanova et al.”] p. 2 (“Many types of market participants engage in securities lending. It contributes substantially to market quality through its roles in market making, facilitating trade settlement, and short selling. Securities lending increases short-term market liquidity by allowing market makers to increase temporarily the supply of securities available to meet demand for those securities. In these ways, securities lending is vital to smooth market functioning.”)

<sup>131</sup> ISLA, “GMSLA Title Transfer,” *available at* <https://www.islaemea.org/gmsla-title-transfer/> (last accessed on November 29, 2021).

<sup>132</sup> *Id.*



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112. With regard to the Analyzed Transaction, loans were made pursuant to the GMSLA framework entered between the Plans and borrowers and the details of each stock loan were specified in an exchange of emails.<sup>133</sup>
113. In practice, the lending and borrowing parties often use intermediaries such as custodians, broker-dealers, and investment managers to manage the securities lending agreement.
114. A securities lending transaction typically requires, among other things, a specification of the security involved, collateral posted for borrowing securities (*e.g.*, cash as was the case for the Analyzed Transactions<sup>134</sup>), the interest rate payable on cash collateral, if applicable, by the security lender, a security borrowing fee, if any, paid by the stock borrower, and the names of the counterparties. These transaction details are not included in the GMSLA itself, which is a framework agreement; rather the parties agree on terms and condition in connection with each individual stock loan.
115. If the collateral is provided as cash, the amount of cash is often higher than 100% of the value of the securities borrowed and depends on typical practices in the region. For example, it is common to see cash collaterals of 102% of the value of the equity on loan in the U.S., and 105% in Europe.<sup>135</sup> In other words, in Europe, a security lender like the RJM Plan can routinely get cash collateral of 105% of the value of securities lent.
116. In practice, the cash collateral is often negotiated between parties and depends on firm-specific and collateral-specific factors. A study reports that “the 90% of

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<sup>133</sup> The GMSLAs entered between the pension plans and the borrowers in the Analyzed Transactions were substantially similar to the GMSLA master template. I provide a comparison of the template with the executed GMSLA as **Exhibit 11**.

<sup>134</sup> Collateral can also be other securities.

<sup>135</sup> See BNY Mellon, “Resetting the Roadmap: Managing in a New Securities Lending Environment for Beneficial Asset Holders,” Office of Innovation Thought Leadership Series. Third Quarter 2009 noting “Currently acceptable cash collateral levels for equity loans are 102% in the US and **105% in Europe**.” (emphasis added). See also “Securities Lending in Physical Replication ETFs: A Review of Providers’ Practices,” Morningstar ETF Research, August 2012, p. 17 noting cash collateral of 105% for security lending by EasyETF in Europe.

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securities lending transactions [in the U.S.] take place with collateral margins ranging from 100% to 111%.”<sup>136</sup>

117. As I noted earlier, the pension plans effectively used security lending transactions to finance their stock purchases. For example, the RJM Plan lent MAERSKB stock to Colbrook Ltd. with a Loan Term beginning on April 17, 2013.<sup>137</sup> On the same day, the RJM Plan received the collateral of DKK 454,275,008.72 (for 10,400 shares), which equals 100% of the trade value of MAERSKB stock, and used that collateral to make the payment for the shares due that day.<sup>138</sup>

**VI. CORPORATE DIVIDENDS**

118. Dividends are distributions that a company announces for its shareholders.<sup>139</sup> Companies typically announce cash dividends but may also announce stock dividends of additional shares. Companies determine whether to pay a dividend at all. If a company decides to pay dividends, it determines the amount, frequency, and dates of dividend payments. Both of the stocks in the Analyzed Transactions paid dividends once a year.<sup>140</sup>
119. Issuers use information as of the end of the day on “record date” to identify the shareholders that will receive payments in the amount of the dividend. Since, as

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<sup>136</sup> SEC Release No. 34-93613, “Reporting of Securities Loans,” *available at* <https://www.sec.gov/rules/proposed/2021/34-93613.pdf> (last accessed on December 3, 2021) (“Margins on securities loans are negotiable. The variation around the standard margins of 102 percent and 105 percent can be attributed to firm-specific differences in margining policies and the quality and type of the collateral security.”) (citing Office of Financial Research Pilot Survey). The cited paper shows that the 90% of securities lending transactions take place with collateral margins ranging from 100% to 111%. *See* Baklanova et al., “A Pilot Survey of Agent Securities Lending Activity,” OFR Working Paper, p. 13, August 23, 2016, *available at* <https://www.financialresearch.gov/working-papers/2016/08/23/pilot-survey-of-agent-securities-lending-activity/> (last accessed on December 3, 2021).

<sup>137</sup> MPSKAT00077876.

<sup>138</sup> MPSKAT00077640; MPSKAT00077876; MPSKAT00077418-9 at MPSKAT00077419. On a per-share basis, this equals DKK 43,680.2893, which is 106.6% of the closing price of DKK 40,960.00 on April 16, 2013, the day prior to the close of the loan. **Exhibit 12** (Bloomberg, L.P. screenshot).

<sup>139</sup> U.S. Securities and Exchange Commission, “Dividend,” *available at* <https://www.investor.gov/introduction-investing/investing-basics/glossary/dividend> (last accessed on November 30, 2021).

<sup>140</sup> **Exhibit 13** (Bloomberg, L.P. screenshots).

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discussed above, stock holding records at the CSD may or may not reflect the end investor, this process involves the company distributing the dividend amounts to the identified holders of record on the record date, which can be custodians, which, in turn, distribute dividend amounts to their clients, which may also be custodians, which, in turn, subsequently distribute dividend amounts to their own clients (and so on, through the custody chain).

120. A stock's "ex-dividend date" is set with reference to the "record date" and the regulator-mandated settlement period for trades that take place on an exchange. As explained above, prior to October 6, 2014, a trade executed on an exchange settled three business after trade date; starting October 6, 2014, a trade executed on an exchange settled two business days after trade date. Thus prior to October 6, 2014, a stock's ex-dividend date was two business days before its record date because any exchange-traded purchase on or after the ex-dividend date would settle after the record date. As of October 6, 2014, the gap between the ex-dividend date and the record date was reduced to one business day. This is consistent with the data I see for the Analyzed Transactions. For the 2013 Analyzed Transaction that I reviewed in this report, the record date was two business days after the ex-dividend date, and for the November/December 2014 Analyzed Transaction, the record date was one business day after the ex-dividend date.<sup>141</sup>
121. The period before the ex-dividend date is called the "cum-dividend" trading period. Cum-dividend means "with the dividend." An investor that purchases shares cum-dividend expects to receive the dividend amount associated with those shares. The cum-dividend period ends on the cum-dividend date, which is the last day an

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<sup>141</sup> Exhibits 14 and 15 (Bloomberg, L.P. screenshots).

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investor that purchases shares has an economic claim to receive the dividend amount and is the day before the ex-dividend date.<sup>142</sup>

122. While the ex-dividend date is set with reference to the settlement period for exchange trades, the economic implications are the same for the investors selecting a settlement period that is longer than the regulator-mandated settlement period for trades executed on an exchange. This is because the market price of a stock before an ex-dividend date is typically higher than the market price of a stock on or after the ex-dividend date. Share prices typically fall on the ex-dividend date commensurate with the size of the dividend and related tax effects.<sup>143, 144</sup>
123. Large differences between the drop in market price on the ex-dividend date and the size of the dividends can create arbitrage opportunities for traders, and market forces would drive the prices such that there are no exploitable arbitrage opportunities.<sup>145</sup>
124. Unless a stock purchase trade settles on or before the record date, additional work may be needed to direct the dividend amount to the party entitled to it.

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<sup>142</sup> U.S. Securities and Exchange Commission, “Ex-Dividend Dates: When Are You Entitled to Stock and Cash Dividends,” *available at* <https://www.investor.gov/introduction-investing/investing-basics/glossary/ex-dividend-dates-when-are-you-entitled-stock-and> (last accessed on November 30, 2021); NASDAQ, “Cum Dividend,” *available at* <https://www.nasdaq.com/glossary/c/cum-dividend> (last accessed on December 30, 2021).

<sup>143</sup> Elton, Edwin J. and Martin J. Gruber, “Marginal Stockholder Tax Rates and the Clientele Effect,” *The Review of Economics and Statistics*, 1970, 52(1), pp. 68-74; Graham, John R., Roni Michaely, and Michael R. Roberts, “Do Price Discreteness and Transactions Costs Affect Stock Returns? Comparing Ex-dividend Pricing Before and After Decimalization,” *Journal of Finance*, 2003, 58(6), pp. 2611-2635 [Graham et al. (2003)], p. 2611; Zhang, Yi, Kathleen A. Farrell, and Todd A. Brown, “Ex-Dividend Day Price and Volume: The Case of 2003 Dividend Tax Cut,” *National Tax Journal*, 2008, 61(1), pp. 105-127 [Zhang et al. (2008)], p. 105.

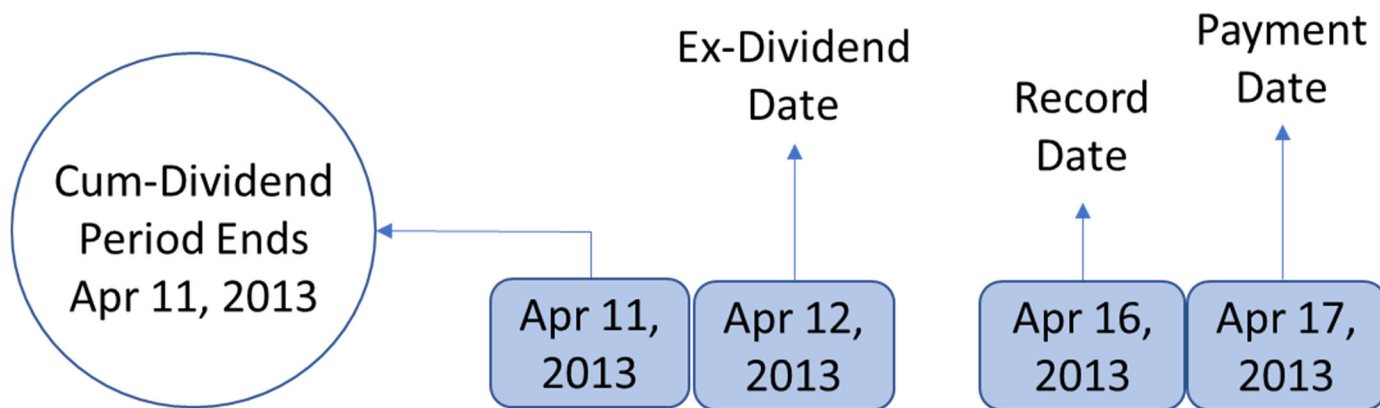
<sup>144</sup> Frank, Murray, and Ravi Jagannathan, “Why Do Stock Prices Drop by Less than the Value of the Dividend? Evidence from a Country Without Taxes,” *Journal of Financial Economics*, 1998, 47(2), pp. 161-188, (“In a perfect Walrasian market with no taxes or transactions costs, **on the ex-dividend day share prices would fall by exactly the value of the dividend that is paid** on each share. It is well known that in fact, on average share prices do not fall by the full amount.”) (emphasis added) *See also* Graham et al. (2003), p. 2611 (explaining that “if capital markets were perfect, a stock’s price would fall by the amount of the dividend on the ex-day. Instead, the ratio of price drop to dividend, known as the ex-day premium, has been consistently below one for decades (*e.g.*, Elton and Gruber (1970), Michaely (1991), or Eades, Hess and Kim (1994))”); Zhang et al. (2008), p. 105 (“the widely documented phenomenon that the ex-dividend day price drops by less than the amount of the dividend”).

<sup>145</sup> There might still be some unexploited arbitrage profits because it might not be profitable for arbitrageurs to act on the opportunities due to the transaction costs and potential risks.

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125. As noted earlier, investors receive dividend amounts processed through their custodians. The calculation of payments owed is a common administrative responsibility of custodians,<sup>146</sup> and may include amounts from the stock issuer via a chain of custody or from another source (*e.g.*, the seller).<sup>147</sup>
126. **Figure 1** below illustrates these periods for the MAERSKB stock trade made by the RJM Plan on April 11, 2013, in its Analyzed Transaction.

**Figure 1: Timeline of Dividend Dates for April 2013 MAERSKB Stock Trade By the RJM Plan<sup>148</sup>**



127. As the figure illustrates, the RJM Plan purchase of the MAERSKB stock on April 11, 2013 occurred in the cum-dividend period (*i.e.*, immediately before the ex-

<sup>146</sup> The Clearing House, “The Custody Services of Banks,” July 2016, p. iii, *available at* [https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728\\_tch\\_white\\_paper\\_the\\_custody\\_services\\_of\\_banks.pdf](https://www.theclearinghouse.org/-/media/tch/documents/research/articles/2016/07/20160728_tch_white_paper_the_custody_services_of_banks.pdf) (last accessed on December 17, 2021).

<sup>147</sup> In Europe, the payment from another source is called payment related to “market claim,” which refers to the “Process to reallocate the proceeds of a Distribution to the contractually entitled party.” See “Market Standards for Corporate Actions Processing,” Revised version 2012 (Updated 2015), *available at* <https://www.clearstream.com/resource/blob/1292816/c8d2a31466a8202f48a8585d11830787/market-standards-ca-data.pdf> (last accessed on December 28, 2021). In the U.S., the payment is known as a “manufactured dividend” or “substitute dividend.” The dividend is “manufactured” in the sense that the payment comes from an entity different from the securities issuer.

<sup>148</sup> Dividend dates from Bloomberg, L.P., shown on **Exhibit 14**. Trade dates from trading documents, as described in Section VIII.A.

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dividend date). Therefore, the RJM Plan bought shares of MAERSKB at a price that reflected an entitlement to a payment in the amount of the dividend.

128. For the Analyzed Transactions, the custodians credited the Plans' accounts with dividend amounts, which equal gross dividends reduced by 27% withholding tax.<sup>149</sup>

**VII. ACADEMIC RESEARCH HAS SHOWN THAT INVESTORS IN NUMEROUS COUNTRIES HAVE ENGAGED IN DIVIDEND ARBITRAGE STRATEGIES**

129. The Pension Plan Strategy pursued in the Analyzed Transactions is a hedged dividend capture strategy and is a type of dividend arbitrage.<sup>150</sup>
130. Arbitrage generally refers to a strategy involving simultaneous trading of identical or similar financial instruments to profit from price differences. The Pension Plan Strategy is an example of arbitrage trading often pursued by tax-advantaged investors.<sup>151</sup>
131. For example, as explained in detail in §VIII, the Pension Plan Strategy involved buying a dividend-paying stock and simultaneously selling forward or flex futures contracts that almost entirely eliminated the risk from fluctuations in the price of the stock while allowing the Plans to benefit from their tax-exempt status and capture the tax withholding on dividends (net of transaction costs).<sup>152</sup>

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<sup>149</sup> The December 2013 Solo Capital Statement for the RJM Plan shows the MAERSKB dividend amount of DKK 9,110,400.00 (see MPSKAT00135581-651 at MPSKAT00135581). The 2014 Old Park Lane statement for the Proper Pacific Plan shows the Chr. Hansen dividend amount of DKK 2,310,387.95 (PROPPACIF00000955-61 at PROPPACIF00000955).

<sup>150</sup> See, e.g., Brown, Keith C., and Scott L. Lummer, "The Cash Management Implications of a Hedged Dividend Capture Strategy," *Financial Management*, 1984, pp. 7-17 discussing and analyzing implications of hedged dividend arbitrage strategy for U.S. corporations, which had a lower tax rates on dividends.

<sup>151</sup> The term dividend arbitrage refers to trading pursued by investors to take advantage of their particular tax situation. Depending on their tax situation, investors like the pension plans might want to pursue a dividend capture strategy, whereas others might want to pursue a dividend give-up strategy. Collectively, I refer to dividend capture and dividend give-up strategies as dividend arbitrage strategies.

<sup>152</sup> For a tax-exempt investor such as the pension plans, flex futures or forward contracts, if available, on the stock would be the instrument of choice from an economic perspective because those contracts can almost entirely eliminate the price risk while allowing the pension plans to capture the arbitrage profit. See, e.g., Brown and Lummer (1984), p. 8 noting that, a hedged dividend capture strategy could involve "the purchase of a share of common stock to cover the coincidental sale of a call option. When done properly, this technique is a virtually risk-free method to secure the cash payout."

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132. Modern finance theory recognizes that investors hold different portfolios, and these differences reflect the differences in investors' financial situations, including their wealth, risk tolerance, investment horizon, tax status, and expectations about the future performance of investments. In particular, some investors are more willing to invest in dividend-paying stocks than others.<sup>153</sup>
133. Dividend arbitrage strategies are neither new nor unique examples of how tax incentives influence financial decisions and investment strategies.<sup>154</sup> Tax motivated arbitrage trading has been studied in the literature for decades. For example, an article published in 1955 in the *Journal of Finance* notes that "on balance, a tax-paying individual will do better to sell before an ex-dividend date but to buy after it. For a tax-exempt institution, the rule is exactly the reverse."<sup>155</sup>
134. Another academic article published in 1994 notes that "dividend capture programs have been employed for many years by U.S. corporations, by Japanese insurers, and by others."<sup>156</sup> The article further notes that "dividend capture activities represent a substantial amount of ex-day trading, primarily for high dividend yield stocks."<sup>157</sup>

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<sup>153</sup> The groups of investors that differ in their preference for dividend-paying stocks are called "clienteles," and the theory of these clienteles and their repercussions for stock prices and firms' dividend policies is called the clientele effect. Differences in investors' preferences for dividend-paying stocks lead to short-term trading around ex-dividend dates. This theory is called dynamic clientele effect or dividend-capture theory. This idea is developed in Kalay, Avner, "The Ex-Dividend Day Behavior of Stock Prices: A Reexamination of the Clientele Effect," *Journal of Finance*, 1982, 37(4), pp. 1059-1070. See also Boyd, John H. and Ravi Jagannathan, "Ex-Dividend Price Behavior of Common Stocks," *Review of Financial Studies*, 1994, 7(4), pp. 711-741.

<sup>154</sup> Numerous financial decisions by consumers and businesses are impacted by the tax implications of those decisions. See, e.g., Scholes, Myron, Mark A. Wolfson, Merle M. Erickson, Michelle L. Hanlon, Edward L. Maydew, and Terrence J. Shevlin, "Taxes and Business Strategy, A Planning Approach," 5th Edition, Prentice Hall, 2014.

<sup>155</sup> Campbell, James A. and William Beranek, "Stock Price Behavior on Ex-Dividend Dates," *Journal of Finance*, 1955, 10(4), pp. 425-429, p. 429. See also Brown and Lummer (1984), p. 16 noting "that a comprehensive program of hedged dividend capture can be a most workable approach to cash management" by the U.S. corporations.

<sup>156</sup> Boyd, John H. and Ravi Jagannathan, "Ex-Dividend Price Behavior of Common Stocks," *Review of Financial Studies*, 1994, 7(4), p. 712.

<sup>157</sup> *Id.* at 713.



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135. Academic research has established that investors in numerous countries have engaged in dividend arbitrage strategies for decades. The following are illustrative.
136. *United States*: Koski and Scruggs (1998) examines NYSE trading and find “strong evidence of significant abnormal volume by securities dealers around ex-dividend days.” They report “strong evidence that securities dealers sell these high-yield stocks cum-dividend and buy-ex dividend.”<sup>158</sup>
137. More recently, Henry and Koski (2017) analyze dividend-paying NYSE-listed stocks for the period from January 1999 to March 2008. They document significant abnormal institutional trading volume during the ex-dividend period and conclude that “[i]nstitutional dividend capture trading is persistent.”<sup>159</sup>
138. *Australia*: Le et al. (2020) study the prices and trading behavior of investors in the Australian stock market and find that “both domestic and foreign investors trade abnormally around the ex-dividend day.”<sup>160</sup> The paper finds:

*Using a sample of Australian stocks during the 1996–2014 period, this study examines how tax heterogeneity between domestic and foreign investors affects trading behaviour and stock prices around the ex-dividend day. Domestic investors prefer dividends and tend to buy stocks cum-dividend and sell them ex-dividend whereas foreign investors tend to trade in the opposite direction.*<sup>161</sup>

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<sup>158</sup> Koski, Jennifer L. and John T. Scruggs, “Who Trades Around the Ex-Dividend Day? Evidence from NYSE Audit File Data,” *Financial Management*, 1998, 27(3), pp. 58-72. The paper categorizes investors trades in three categories and reports that “[o]verall, we find strong evidence of dividend-capture trading by securities dealers, some evidence of corporate dividend-capture trading, but little evidence of tax-clientele trading.” [Koski and Scruggs (1998), p. 71].

<sup>159</sup> Henry, Tyler R. and Jennifer L. Koski, “Ex-Dividend Profitability and Institutional Trading Skill,” *Journal of Finance*, 2017, 72(1), pp. 461-493, Abstract.

<sup>160</sup> Le, Nguyen Ngoc Anh, Xiangkang Yin, and Jing Zhao, “Effects of Investor Tax Heterogeneity on Stock Prices and Trading Behaviour Around the Ex-Dividend Day: The Case of Australia,” *Accounting & Finance*, 2020, 60(4), pp. 3775-3812, [Le et al. (2020)], p. 3776.

<sup>161</sup> Le et al. (2020), abstract (emphasis added). In Australia, domestic investors value dividends more than the foreign investors due to “franking credits.” See Le et al. (2020), p. 3776 explaining “Australia operates a full dividend imputation system in which franking credits or credits for corporate tax paid can be attached to dividends when they are distributed. The availability of franking credits creates a well-defined difference between domestic and foreign investors in terms of tax preferences for dividends. Domestic investors can utilise franking credits to offset their tax obligations and the unused franking credits can be refunded. On the other hand, franking credits have limited and little value to foreign investors.”



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139. *Finland*: Rantapuska (2008) examines the trading behavior of investors in the Finnish stock market over the period from January 1, 1995, to November 28, 2002.<sup>162</sup> The paper finds that “investors with a preference for dividend income buy shares cum-dividend and sell ex-dividend; the reverse is true for investors with the opposite preference.”<sup>163</sup> The paper also reports dividend arbitrage trades with a holding period of just one night and finds that investors “engage in overnight [dividend] arbitrage, earning on average a 2% overnight return on their invested capital.”<sup>164</sup>
140. *Italy*: Michaely and Murgia (1995) study “all common and nonconvertible, bearer-savings, dividend-paying stocks traded on the MSE [Milan Stock Exchange] between 1981 and 1990.”<sup>165</sup> During the period of study, “In Italy, savings stock dividends are taxed at a fixed rate of 15 percent for all market participants, whereas the tax rates on common stock dividends vary widely across market participants.”<sup>166</sup> The authors “bring evidence consistent with the hypothesis that a significant portion of the ex-[dividend] day [trading] activity is motivated by differential dividend tax[es].”<sup>167</sup>
141. *Taiwan*: Chen et al. (2013) research stocks traded on the Taiwan Stock Exchange during the period from January 1992 to December 2006 and “find that differential taxes are an important factor affecting share prices and the behavior of investors around the ex-dividend day.”<sup>168</sup> They report that “high tax-bracket investors sell shares cum-dividend, subsequently reversing to buy shares on the ex-dividend day,

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<sup>162</sup> Rantapuska, Elias, “Ex-Dividend Day Trading: Who, How, and Why?: Evidence from the Finnish Market,” *Journal of Financial Economics*, 2008, 88(2), pp. 355-374, [Rantapuska (2008)], p. 360.

<sup>163</sup> Rantapuska (2008), Abstract.

<sup>164</sup> *Id.*

<sup>165</sup> Michaely, Roni and Maurizio Murgia, “The Effect of Tax Heterogeneity on Prices and Volumes around the Ex-Dividend Day: Evidence from the Milan Stock Exchange,” *Review of Financial Studies*, 1995, 8(2), pp. 369-399 [Michaely and Murgia (1995)], p. 381.

<sup>166</sup> *Id.* at 370.

<sup>167</sup> *Id.* at 396.

<sup>168</sup> Chen, Hung-Ling, Edward H. Chow, and Cheng-Yi Shiu, “Ex-Dividend Prices and Investor trades: Evidence from Taiwan,” *Pacific-Basin Finance Journal*, 2013, 24, pp. 39-65, Abstract.

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whereas low tax-bracket individual investors, proprietary traders and corporate shareholders trade in the opposite direction.”<sup>169</sup>

142. Research has shown that, in general, trading volume increases around the ex-dividend date.<sup>170</sup> This is consistent with what SKAT has identified as “remarkably large stock trades around the time of the dividend.”<sup>171</sup> SKAT has charts showing trading in terms of DKK-volume (shares traded multiplied by trading price) and ex-dividend dates that indicate increased trading around the ex-dividend dates for several Danish equity securities for the period from 2012 to 2014.<sup>172</sup>
143. In short, academic research has shown that investors in numerous countries have engaged in dividend arbitrage strategies.

**VIII. THE ANALYZED TRANSACTIONS**

144. The following is an overview of the trades and activity included in both of the Analyzed Transactions:
- a. Plans placed an order with an executing broker to purchase shares of a dividend-paying Danish stock on the day immediately before the ex-dividend date, *i.e.*, on the last cum-dividend date.<sup>173</sup> The executing broker confirmed that the order has been executed the same day and gave up the execution to the Plans’ custodians for trade clearance and settlement; the settlement date was after the dividend record date.
  - b. On the same day as the stock purchase, Plans hedged the price risk of the purchased stocks by entering into either flex futures or forward contracts that allowed Plans to sell those shares (*i.e.*, the same number of shares) on a future date at a pre-determined price.<sup>174</sup>

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<sup>169</sup> *Id.*

<sup>170</sup> *See, e.g.*, Koski and Scruggs (1998); *See also* Graham, John R. and Alok Kumar, “Do Dividend Clienteles Exist? Evidence on Dividend Preferences of Retail Investors,” *The Journal of Finance*, 2006, 61(3), pp. 1305-1336.

<sup>171</sup> SKAT\_MDL\_001\_00471881\_T.

<sup>172</sup> SKAT\_MDL\_001\_00471889\_T.

<sup>173</sup> As explained earlier, the shares purchased in the Analyzed Transactions were for the stocks of two large Danish companies.

<sup>174</sup> The flex futures contracts were cleared by Bclear, an NYSE Euronext subsidiary. The forward contracts were done under a bilateral agreement directly entered into by the plan with another counterparty.

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- c. On the stock trade settlement date, Plans lent out the shares to a counterparty and received a cash amount equal to the stock value on the stock purchase date as collateral. Under the lending agreement, Plans paid an interest to the counterparty for the cash collateral and received a fee for lending the stock.<sup>175</sup>
  - d. On or after the dividend payment date, the custodian credited the Plans' accounts with a dividend amount equal to 73% of the gross dividend for the shares.
  - e. Sometime after the dividend record date, the Plans unwound the transaction, which involved the following trades and activities:
    - i. Plans recalled the loaned shares, sold the recalled shares, and purchased the flex futures or forward contracts with the same maturity as the contracts they previously sold.
    - ii. The custodian debited the refunded collateral from the Plan accounts and credited the stock sale proceeds to the Plan accounts.
  - f. Subsequently, the custodian debited the interest payment under the stock lending agreement, and other transaction costs from the Plan accounts and credited the fees on the stock lending agreement to the Plan accounts.
145. As described above, each Plan obtained economic exposure to the issuer's shares when the broker executed the Plan's purchase order on the last cum-dividend date. Because the Plans purchased stocks on a cum-dividend date, the Plans obtained the economic right to receive a dividend amount.
146. The stock lending financed the Plans' purchases of the shares. In economic substance, the Plans obtained loans collateralized by their shares.
147. The flex futures and the forward contracts used by the RJM Plan and the Proper Pacific Plan, respectively, hedged the risk to which each Plan was exposed due to the fluctuations in the prices of those shares – hence the term “hedged dividend capture.” Without the hedge, the risk from the share price fluctuations would often render the Pension Fund Strategy unattractive. The hedge was established at the time of the stock purchase via forward or futures contracts through which Plans agreed to sell

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<sup>175</sup> Proper Pacific also paid clearing fees on the stock loan start and recall. (PROPPACIF00000109-112 at PROPPACIF00000112). The relevant statements for the RJM Plan do not show debit of any clearing fees related to the stock loan start/ recall from the Plan's account. (MPSKAT00080613-4; MPSKAT00086209-10.)

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shares as of a certain future date. Plans later purchased offsetting flex futures or forward contracts that had the effect of closing out the hedge.

148. Each Plan's **gross** profit from the Pension Fund Strategy was the sum of:
- a. The profit (loss) on the stock trade,
  - b. The profit (loss) on the flex futures or forward hedging transaction,
  - c. The gross dividend amount received (*i.e.*, the sum of the dividend net of withholding tax payment received from the custodian and the dividend reclaim), and
  - d. The net rebate from lending the stock (*i.e.*, the difference between the fee for lending the stock and interest for the cash collateral).<sup>176</sup>
149. Because the Plans incurred fees for various trades in the Analyzed Transactions, each Plan's **net** profit equals the gross profit less the fees paid on the various transactions (*e.g.*, stock purchase, futures purchase, and stock loan).
150. As explained below, the RJM Plan's net profit from the MAERSKB stock related transactions was DKK 3,360,345.58, and the Proper Pacific Plan's net profit for the Chr. Hansen stock related transactions was DKK 790,583.01.

**A. RJM Plan's Analyzed Transaction**

151. The Analyzed Transaction for the RJM Plan includes the Plan's 2013 trades in MAERSKB, class B shares issued by A.P. Moller-Maersk A/S, a large Danish company.

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<sup>176</sup> As noted earlier, Proper Pacific also paid clearing fees on the stock loan start and recall.

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152. In 2013, MAERSKB declared an annual dividend of DKK 1,200.00 per share.<sup>177</sup>  
The ex-dividend date was April 12, 2013 and the dividend record date was April 16, 2013.<sup>178</sup>
153. The RJM Plan's hedged dividend capture strategy in MAERSKB stock involved several transactions. Solo Capital, which was based in the U.K., was the custodian for these transactions.<sup>179</sup> **Figure 2** below shows various transactions.

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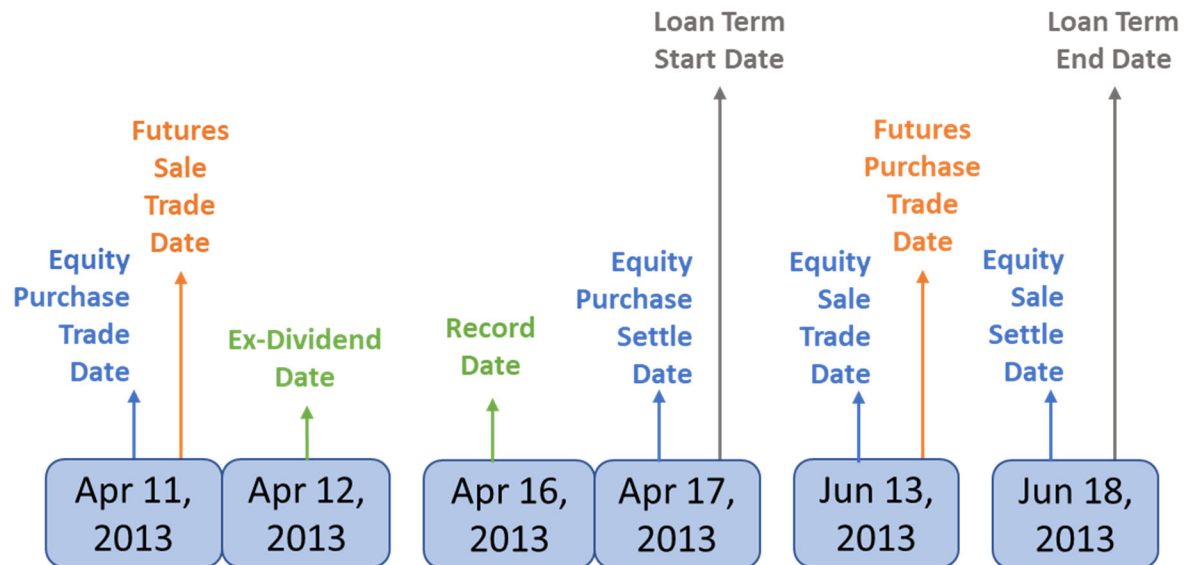
<sup>177</sup> Per Solo Capital's Dividend Credit Advice to the RJM Plan, issued April 17, 2013, the RJM Plan was notified of a MAERSKB gross dividend of DKK 1,200 per share, which is equal to DKK 12,480,000.00 divided by 10,400 shares (WH\_MDL\_00268445-6 at WH\_MDL\_00268445).

Bloomberg, L.P. shows a gross dividend of DKK 240.00 per share for MAERSKB (**Exhibit 14**), which is one-fifth of the gross dividend of DKK 1,200 per share. The figure of DKK 240.00 per share is retroactively adjusted by an adjustment factor of 5 per Bloomberg, L.P. based on the fact that in 2014, AP Moller Maersk issued four additional shares of MAERSKB for every share of MAERSKB (See A.P. Moller Maersk A/S 2014 Annual Report, p. 21; A.P. Moller – Maersk A/S, “A.P. Moller – Maersk A/S – Proposal for Issuance of Bonus Shares and for Election of New Members for the Board of Directors,” February 27, 2014).

<sup>178</sup> **Exhibit 14** (Bloomberg, L.P. screenshot).

<sup>179</sup> See Client Custody Agreement between Solo Capital Partners LLP and RJM Capital LLC Pension Plan, 2013 (MPSKAT00003776-84); Client Custody Agreement between Solo Capital Partners LLP and RJM Capital LLC Pension Plan, 2014 (MPSKAT00104151-72).

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**Figure 2: The RJM Plan 2013 Transactions Related To MAERSKB Stock<sup>180</sup>**

154. On April 11, 2013, the RJM Plan executed two opening transactions for its hedged dividend capture strategy – purchased the MAERSKB stock and sold flex futures on the same stock to hedge the price risk.
- a) On April 11, 2013 (*i.e.*, the day before the ex-dividend date), the RJM Plan asked FGC Securities to purchase 10,400 shares of MAERSKB stock at a price of DKK 43,680.2893 per share.<sup>181</sup> In emails to the RJM Plan, Solo acknowledged and approved the RJM Plan's request to FGC Securities to purchase 10,400 shares of MAERSKB stock at a price of DKK 43,680.2893 per share.<sup>182</sup> As shown in FGC Securities' emailed trade confirmation, FGC Securities confirmed the April 11 execution at that price.<sup>183</sup> FGC Securities gave up the trade to Solo Capital for

<sup>180</sup> Dividend dates from Bloomberg, L.P., shown on **Exhibit 14**. Transaction dates from trading documents, as described in this section.

<sup>181</sup> MPSKAT00076964; MPSKAT00077050; MPSKAT00077088.

<sup>182</sup> MPSKAT00077090; MPSKAT00077295.

<sup>183</sup> MPSKAT00077415; MPSKAT00077418-9 at MPSKAT00077419.

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clearing and settlement.<sup>184</sup> Per the trade approval, the stock purchase settlement date was April 17, 2013 (*i.e.*, the day after the dividend record date).<sup>185</sup> The total value of the trade was DKK 454,275,008.72.<sup>186</sup> The RJM Plan's economic exposure to 10,400 shares of MAERSKB stock began when the trade was executed. The economic exposure included the claim to a dividend amount as the stock was purchased before the ex-dividend date.

- b) Also on April 11, 2013 (*i.e.*, the same day as the stock purchase date), the RJM Plan asked FGC securities to sell 104 flex futures contracts on MAERSKB stock for DKK 42,821.31 per share.<sup>187</sup> As shown in FGC Securities' trade confirmation, FGC Securities confirmed the April 11 sale of the flex futures on MAERSKB stock for DKK 42,821.31 per share, with each contract covering 100 shares of MAERSKB stock.<sup>188</sup> The total contract value was DKK 445,341,624.00.<sup>189</sup> The expiration date for the contracts was June 21, 2013.<sup>190</sup>

155. The RJM Plan executed a stock lending transaction with an April 17, 2013 Loan Term start date.<sup>191</sup>

- a) The RJM Plan loaned 10,400 shares of MAERSKB to Colbrook Ltd. at DKK 43,680.2893 per share in exchange for collateral of DKK 454,275,008.72.<sup>192</sup> The

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<sup>184</sup> MPSKAT00077090; MPSKAT00077295.

<sup>185</sup> MPSKAT00077295.

<sup>186</sup> MPSKAT00077418-9 at MPSKAT00077419.

<sup>187</sup> MPSKAT00076965.

<sup>188</sup> MPSKAT00077418-9 at MPSKAT00077418.

<sup>189</sup> MPSKAT00077418-9 at MPSKAT00077418. DKK 445,341,624.00 equals futures contract price of DKK 42,821.31 (price per MAERSKB share) multiplied by 104 contracts further multiplied by 100 (shares per contract).

<sup>190</sup> MPSKAT00077418-9 at MPSKAT00077418. Per FGC Securities' trade confirmation, the flex futures trade was conducted through the Euronext - BClear exchange, which as noted earlier, is a clearing platform for flex futures contracts.

<sup>191</sup> MPSKAT00077640.

<sup>192</sup> MPSKAT00135581-651 at MPSKAT00135590 and MPSKAT00135603.

On a per-share basis, the cash collateral equals DKK 43,680.2893, which is 106.6% of the closing price of DKK 40,960.00 on April 16, 2013, the day prior to the close of the loan, as shown on **Exhibit 12**.

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interest rate on the cash collateral was Overnight DKK LIBOR plus 70 basis points. The stock lending fee was Overnight DKK LIBOR plus 49.55 basis points. That is, on a net basis, the RJM Plan had to pay a fee of 20.45 basis points to the stock borrower.<sup>193</sup>

156. As noted above, the collateral was used to finance the share purchase.<sup>194</sup>
157. The stock lending agreement that the RJM Plan entered into was based on the standard security lending agreement template published by ISLA.<sup>195</sup> The RJM Plan's economic exposure to the shares did not end after lending the stock as explained in ¶98 of §V.A.
158. On June 13, 2013, the RJM Plan sold its stock position and sold an offsetting hedge to terminate its hedged dividend capture strategy.
  - a) In a June 13, 2013 email, the RJM Plan asked FGC Securities to sell 10,400 shares of MAERSKB stock at DKK 40,750.2863 per share.<sup>196, 197</sup> FGC Securities confirmed the sale in an emailed trade confirmation.<sup>198</sup> FGC Securities gave up the trade to Solo Capital for clearing and settlement.<sup>199</sup> The settlement date for the stock trade was June 18, 2013. The total sale proceeds from the trade were DKK 423,802,977.52.<sup>200</sup>

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<sup>193</sup> MPSKAT00077640; MPSKAT00077781; MPSKAT00077876.

<sup>194</sup> MPSKAT00077090; MPSKAT00077295; MPSKAT00077781; MPSKAT00077876.

<sup>195</sup> ISLA, Global Master Securities Lending Agreement, Version: January 2010, *available at* [https://www.islaemea.org/wp-content/uploads/2019/03/GMSLA\\_2010\\_amendments\\_July\\_2012-1.pdf](https://www.islaemea.org/wp-content/uploads/2019/03/GMSLA_2010_amendments_July_2012-1.pdf). (See, e.g., Global Master Securities Lending Agreement between Colbrook Ltd. and RJM Capital Pension Plan (MPSKAT00068151-92)).

<sup>196</sup> MPSKAT00085109; MPSKAT00085149; MPSKAT00085175-6.

<sup>197</sup> Per its June 13, 2013 emails to the RJM Plan, Solo acknowledged and approved the RJM Plan's request to FGC Securities to sell 10,400 shares of MAERSKB stock at DKK 40,750.2863 per share. MPSKAT00085178; MPSKAT00085222-3.

<sup>198</sup> MPSKAT00085288; MPSKAT00085289.

<sup>199</sup> MPSKAT00085178; MPSKAT00085222-3.

<sup>200</sup> MPSKAT00085222-3; MPSKAT00085289.



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- b) Also on June 13, 2013, the RJM Plan asked FGC Securities to buy 104 flex futures contracts on MAERSKB stock for DKK 40,750.94 per share.<sup>201</sup> FGC Securities executed the trade and confirmed the purchase of 104 flex futures contracts for DKK 40,750.94 per share in an equity futures confirmation.<sup>202</sup> The total value of the contracts was DKK 423,809,776.00.<sup>203</sup> The closing trade was cleared via BCclear.
159. Also on June 13, 2013, the RJM Plan emailed Colbrook Ltd. requesting to recall the 10,400 loaned shares of MAERSKB.<sup>204, 205</sup> On June 18, 2013, the RJM Plan's shares were received back from the stock loan and delivered to the new purchaser while the cash proceeds of the sale were used to pay back the stock loan collateral amount.
160. The RJM Plan's gross profit from the hedged dividend capture transaction is DKK 340.37 per share (for an aggregate amount of DKK 3,539,816.80), calculated as the sum of the gain or loss on stocks and flex futures transactions, dividend amount credited by the custodian, and the tax reclaim.
- a) Stock: The stock trade resulted in a loss of DKK 2,930.00 per share (DKK 40,750.2863 sale price per share less DKK 43,680.2893 purchase price per share).
- b) Futures: The futures trades resulted in a gain of DKK 2,070.37 per share (DKK 42,821.31 sale price per share less DKK 40,750.94 purchase price per share).

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<sup>201</sup> MPSKAT00085108.

<sup>202</sup> MPSKAT00085291.

<sup>203</sup> *Id.*

<sup>204</sup> MPSKAT00085143; MPSKAT00085254-5 at MPSKAT00085254; MPSKAT00085260-1 at MPSKAT00085260; MPSKAT00085264-5 at MPSKAT00085264.

<sup>205</sup> Solo acknowledged the request on June 13, 2013 and issued an ex-post approval on June 25, 2013, respectively, the RJM Plan recalled the 10,400 shares of MAERSKB. MPSKAT00085269; MPSKAT00085876.

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- c) Dividends: Solo credited the RJM Plan account with dividends of DKK 876.00 per share, which is 73% of the gross dividend of DKK 1,200.00 per share.<sup>206</sup>
161. As shown in Solo's statement for the RJM Plan for the year ending December 31, 2013, the RJM Plan incurred interest charges of DKK 588,401.43 to Colbrook Ltd. and earned stock lending fees of DKK 440,269.76 from Colbrook Ltd.<sup>207</sup> As a result, the RJM Plan paid a net fee of DKK 148,131.67 on the stock lending transaction.<sup>208</sup> Additionally, the RJM Plan paid other fees (*e.g.*, stockbroker, futures broker, custody fees, *etc.*) of DKK 31,339.55.<sup>209</sup> Thus, the RJM Plan paid total fees of DKK 179,471.22 (sum of DKK 148,131.67 and DKK 31,339.55).
162. Subtracting transaction fees of DKK 179,471.22 from the RJM Plan's gross profit of DKK 3,539,816.80 yields a total net profit of DKK 3,360,345.58. These calculations are shown in **Table 1** below.

**Table 1: The RJM Plan 2013 Transactions Related to MAERSKB Stock Profit Calculations**

	Profit	
	<i>per share</i>	<i>aggregate</i>
Stock Trade	DKK (2,930.00)	DKK (30,472,031.20)
Futures Trade	DKK 2,070.37	DKK 21,531,848.00
Dividend Credit by Custodian	DKK 876.00	DKK 9,110,400.00
Tax Reclaim	DKK 324.00	DKK 3,369,600.00
Gross Profit	<b>DKK 340.37</b>	<b>DKK 3,539,816.80</b>
Less Transaction Fees	DKK (17.26)	DKK (179,471.22)
Net Profit	<b>DKK 323.11</b>	<b>DKK 3,360,345.58</b>

<sup>206</sup> WH\_MD\_00268445-6 at WH\_MD\_00268445. The custodian credited the pension plan's account with a dividend amount of DKK 9,110,400, which equals 73% of the gross dividend of 12,480,000. The amount of DKK 9,110,400 equals DKK 876.00 dividend per share (*i.e.*, DKK 9,110,400 divided by 10,400 shares). The gross profit calculation takes into account the tax reclaim of DKK 324.00 per share (*i.e.*, the gross dividend of DKK 1200.00 per share less DKK 876.00 credited by the custodian to the plan's account).

<sup>207</sup> MPSKAT00135581-651 at MPSKAT00135603-4.

<sup>208</sup> DKK 588,401.43 minus DKK 440,269.76 equals DKK 148,131.67.

<sup>209</sup> See **Exhibit 16** for the calculation of other fees.

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**B. Proper Pacific Plan's Analyzed Transaction**

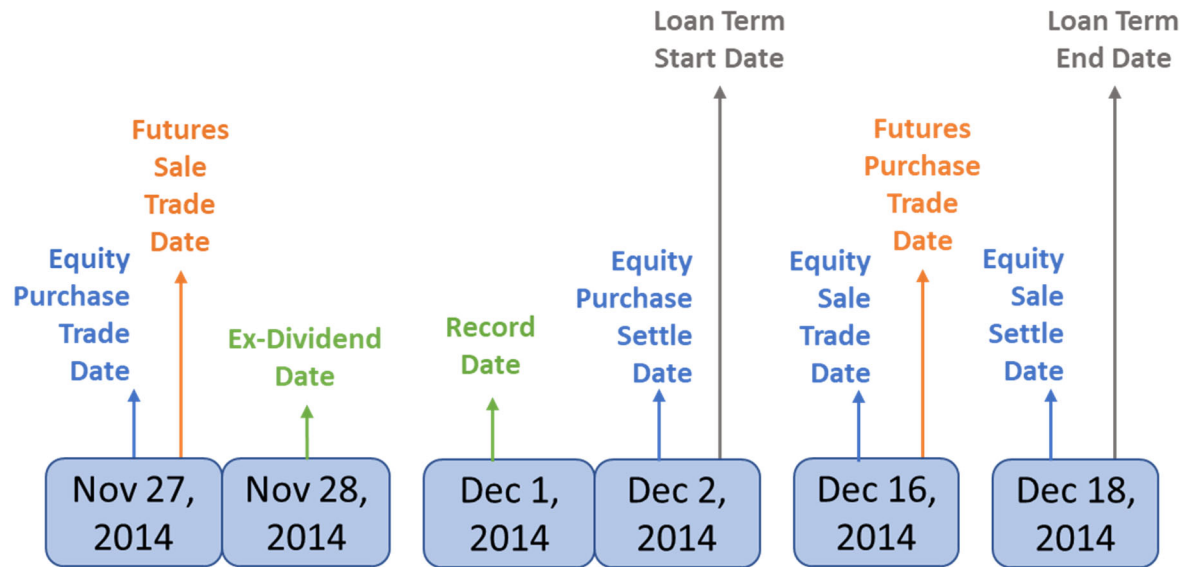
163. The Analyzed Transaction for the Proper Pacific Plan includes the Plan's 2014 trades in shares issued by Chr. Hansen Holding A/S, a large Danish company.
164. In 2014, Chr. Hansen declared an annual dividend of DKK 3.77 per share. The ex-dividend date was November 28, 2014 and the dividend record date was December 1, 2014.<sup>210</sup>
165. The Proper Pacific Plan's hedged dividend capture strategy in Chr. Hansen stock involved several transactions. Old Park Lane, which was based in the U.K., was the custodian for these transactions.<sup>211</sup> **Figure 3** below shows various transactions.

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<sup>210</sup> **Exhibit 15** (Bloomberg, L.P. screenshot).

<sup>211</sup> See Old Park Lane Capital Limited, Terms and Conditions for Custody Services (PROPPACIF00000784-816).

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**Figure 3: The Proper Pacific Plan 2014 Transactions Related to Chr. Hansen Stock<sup>212</sup>**

166. On November 27, 2014, the Proper Pacific Plan executed two opening transactions for its hedged dividend capture strategy – purchased the Chr. Hansen stock and sold forward contracts on the same stock to hedge the price risk.

- a) On November 27, 2014 (*i.e.*, the day before the ex-dividend date), the Proper Pacific Plan asked Bastion Capital London Ltd. to purchase 839,500 shares of Chr. Hansen stock at the close of business price.<sup>213</sup> In emails to the Proper Pacific Plan, Old Park Lane acknowledged and approved the Proper Pacific Plan's request to Bastion Capital London Ltd. to purchase 839,500 shares of Chr. Hansen stock at a price of DKK 258.90 per share.<sup>214</sup> As shown in Bastion Capital London Ltd.'s emailed trade confirmation, Bastion Capital London Ltd. confirmed the execution at the price of

<sup>212</sup> Dividend dates from Bloomberg, L.P., as shown in **Exhibit 15**. Transaction dates from trading documents, as described in this section.

<sup>213</sup> PROPPACIF00001323-4.

<sup>214</sup> PROPPACIF00001317; PROPPACIF00001318. The close of business price of DKK 258.90 is shown in an email from Bastion Capital London Ltd. to the Proper Pacific Plan confirming the trade price. PROPPACIF00001323-4 at PROPPACIF00001323.

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DKK 258.90.<sup>215</sup> As reflected in Old Park Lane's emails approving the transaction, Bastion Capital London Ltd. gave up the trade to Old Park Lane for clearing and settlement.<sup>216</sup> Per the trade confirmation, the stock purchase settlement date was December 2, 2014 (*i.e.*, the day after the dividend record date).<sup>217</sup> The total value of the trade was DKK 217,346,550.<sup>218</sup> The Proper Pacific Plan's economic exposure to 839,500 shares of Chr. Hansen stock began when the trade was executed. The economic exposure included the claim to a dividend amount as the stock was purchased before the ex-dividend date.

- b) Also on November 27, 2014, the Proper Pacific Plan asked Amalthea Enterprises Ltd. to sell forward 839,500 shares of Chr. Hansen stock at DKK 256.42 per share.<sup>219</sup> As shown in November 27, 2014 emails to the Proper Pacific Plan, Old Park Lane acknowledged and matched the Proper Pacific Plan's trade with Amalthea Enterprises Ltd. to sell forward 839,500 shares of Chr. Hansen stock for DKK 256.42 per share.<sup>220</sup> The total value for the contracts was DKK 215,264,590.<sup>221</sup> The expiration date for the contracts was March 20, 2015.<sup>222</sup>

167. The Proper Pacific Plan executed a stock lending transaction with a December 2, 2014 Loan Term start date.<sup>223</sup>

- a) The Proper Pacific Plan loaned 839,500 shares of Chr. Hansen to Gnosis Capital Ltd. at DKK 258.90 per share in exchange for collateral of DKK 217,346,550.<sup>224</sup> The

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<sup>215</sup> PROPPACIF00001326; PROPPACIF00001327.

<sup>216</sup> PROPPACIF00001317; PROPPACIF00001318.

<sup>217</sup> PROPPACIF00001327.

<sup>218</sup> This is 839,500 shares multiplied by the price of DKK 258.90. *See* PROPPACIF00001327.

<sup>219</sup> PROPPACIF00001325.

<sup>220</sup> PROPPACIF00001319; PROPPACIF00001320.

<sup>221</sup> PROPPACIF00001320.

<sup>222</sup> *Id.*

<sup>223</sup> PROPPACIF00001330.

<sup>224</sup> PROPPACIF00001330; PROPPACIF00000109-112 at PROPPACIF00000112.

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interest rate on the cash collateral was 70 basis points.<sup>225</sup> The stock lending fee was 35.67 basis points.<sup>226</sup> That is, on a net basis, the Proper Pacific Plan had to pay a fee of 34.33 basis points to the stock borrower.<sup>227</sup>

168. As noted above, the collateral was used to finance the share purchase.<sup>228</sup>
169. The stock lending agreement that the Proper Pacific Plan entered into was based on the standard security lending agreement template published by ISLA.<sup>229</sup> The Proper Pacific Plan's economic exposure to the shares did not end after lending the stock as explained in ¶98 of §V.A.
170. On December 16, 2014, the Proper Pacific Plan sold its stock position and purchased an offsetting hedge to terminate its hedged dividend capture strategy.
  - a) In a December 16, 2014 email, the Proper Pacific Plan asked Bastion Capital London Ltd. to sell 839,500 shares of Chr. Hansen stock at the close of business price.<sup>230, 231</sup> Bastion Capital London Ltd. confirmed the sale at the price of DKK 261.00 per share in an emailed trade confirmation.<sup>232</sup> As reflected in Old Park Lane's emails approving the transaction, Bastion Capital London Ltd. gave up the trade to Old Park Lane for clearing and settlement.<sup>233</sup> The settlement date for the stock trade was

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<sup>225</sup> PROPPACIF00001330; PROPPACIF00000109-112 at PROPPACIF00000112.

<sup>226</sup> PROPPACIF00001330; PROPPACIF00000109-112 at PROPPACIF00000112.

<sup>227</sup> 70 less 35.67 is equal to 34.33.

<sup>228</sup> PROPPACIF00001317; PROPPACIF00001318; PROPPACIF00001327; PROPPACIF00001330; PROPPACIF00001331.

<sup>229</sup> Compare PROPPACIF00001035-78 with ISLA, Global Master Securities Lending Agreement, Version: January 2010, available at [https://www.islaemea.org/wp-content/uploads/2019/03/GMSLA\\_2010\\_amendments\\_July\\_2012-1.pdf](https://www.islaemea.org/wp-content/uploads/2019/03/GMSLA_2010_amendments_July_2012-1.pdf).

<sup>230</sup> PROPPACIF00001383-4.

<sup>231</sup> Per its December 16, 2014 emails to the Proper Pacific Plan, Old Park Lane acknowledged and approved the Proper Pacific Plan's request to Bastion Capital London Ltd. to sell 839,500 shares of Chr. Hansen stock. PROPPACIF00001375; PROPPACIF00001373.

<sup>232</sup> PROPPACIF00001395; PROPPACIF00001396.

<sup>233</sup> PROPPACIF00001375; PROPPACIF00001373.

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December 18, 2014.<sup>234</sup> The total value of the sale proceeds from the trade was DKK 219,109,500.<sup>235</sup>

b) Also on December 16, 2014, the Proper Pacific Plan asked Amalthea Enterprises Ltd. to buy forward 839,500 shares of Chr. Hansen stock at DKK 261.22 per share.<sup>236</sup> Based on December 16, 2014 emails to the Proper Pacific Plan, Old Park Lane acknowledged and matched the Proper Pacific Plan's trade with Amalthea Enterprises Ltd. to buy forward 839,500 shares of Chr. Hansen stock at DKK 261.22 per share.<sup>237</sup> The total value of the contracts was DKK 219,294,190.<sup>238</sup> The expiration date for the contracts was March 20, 2015.<sup>239</sup>

171. Also on December 16, 2014, the Proper Pacific Plan emailed Gnosis Capital Ltd. requesting to recall the 839,500 loaned shares of Chr. Hansen.<sup>240, 241</sup> On December 18, 2014, the Proper Pacific Plan's shares were received back from the stock loan and delivered to the new purchaser while the cash proceeds of the sale were used to pay back the stock loan.

172. The Proper Pacific Plan's gross profit from the hedged dividend capture transaction was DKK 1.07 per share (for an aggregate amount of DKK 898,265), calculated as the sum of the gain or loss on stock and forward transactions, the dividend amount credited by the custodian, and the tax reclaim.

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<sup>234</sup> PROPPACIF00001396.

<sup>235</sup> This is 839,500 shares multiplied by the price of DKK 261.00. *See* PROPPACIF00001396.

<sup>236</sup> PROPPACIF00001385.

<sup>237</sup> PROPPACIF00001376; PROPPACIF00001378.

<sup>238</sup> PROPPACIF00001378.

<sup>239</sup> *Id.*

<sup>240</sup> PROPPACIF00001379-80 at PROPPACIF00001379.

<sup>241</sup> Per Old Park Lane's acknowledgement and approval emails to the Proper Pacific Plan dated December 16, 2014, the Proper Pacific Plan recalled the 839,500 shares that the Proper Pacific Plan loaned to Gnosis Capital Ltd. PROPPACIF00001377; PROPPACIF00001374.

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- a) Stock: The stock trade resulted in a gain of DKK 2.10 per share (DKK 261.00 sale price per share less DKK 258.90 purchase price per share).
  - b) Forwards: The forward trades resulted in a loss of DKK 4.80 per share (DKK 256.42 sale price per share less DKK 261.22 purchase price per share).
  - c) Dividends: Old Park Lane credited the Proper Pacific Plan account with dividends of DKK 2.75, which equals 73% of gross dividend of DKK 3.77 per share.<sup>242</sup>
173. As shown in Old Park Lane's statement for the Proper Pacific Plan for the year ending December 31, 2014, the Proper Pacific Plan incurred interest of DKK 67,618.93 to Gnosis Capital Ltd. and earned stock lending fees of DKK 23,880.98 from Gnosis Capital Ltd.<sup>243</sup> As a result, the Proper Pacific Plan paid a net fee of DKK 43,737.95 on the stock lending transaction.<sup>244</sup> Additionally, the Proper Pacific Plan paid other fees (e.g., stockbroker, custody fees, etc.) of DKK 63,944.04.<sup>245</sup> Thus, the Proper Pacific Plan paid a total fee of DKK 107,681.99 (sum of DKK 43,737.95 and DKK 63,944.04).
174. Subtracting transaction fees of DKK 107,681.99 from the Proper Pacific Plan's gross profit of DKK 898,265 yields a total net profit of DKK 790,583.01. These calculations are shown in **Table 2** below.

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<sup>242</sup> PROPPACIF00000955-61 at PROPPACIF00000955. The custodian credited the pension plan's account with a dividend amount of DKK 2,310,387.95, which equals 73% of the gross dividend of DKK 3,164,915. The amount of 2,310,387.95 equals DKK 2.75 dividend per share (i.e., DKK 2,310,387.95 divided by 839,500 shares). The gross profit calculation takes into account the tax reclaim of DKK 1.02 per share (i.e., the gross dividend of DKK 3.77 per share less DKK 2.75 credited by the custodian to the plan's account).

<sup>243</sup> PROPPACIF00000955-61 at PROPPACIF00000959.

<sup>244</sup> PROPPACIF00000955-61 at PROPPACIF00000959.

<sup>245</sup> See **Exhibit 17** for the calculation of other fees.



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**Table 2: The Proper Pacific Plan 2014 Transactions Related to Chr. Hansen Stock Profit Calculations**

	Profit			
	<i>per share</i>		<i>aggregate</i>	
Stock Trade	DKK	2.10	DKK	1,762,950.00
Futures Trade	DKK	(4.80)	DKK	(4,029,600.00)
Dividend Credit by Custodian	DKK	2.75	DKK	2,310,387.95
Tax Reclaim	DKK	1.02	DKK	854,527.05
Gross Profit	<b>DKK</b>	<b>1.07</b>	<b>DKK</b>	<b>898,265.00</b>
Less Transaction Fees	DKK	(0.13)	DKK	(107,681.99)
Net Profit	<b>DKK</b>	<b>0.94</b>	<b>DKK</b>	<b>790,583.01</b>

\*\*\*\*\*

My work is ongoing and my opinions are subject to revision based on new information, which subsequently may be provided to or obtained by me.



Emre Carr, Ph.D., CFA

December 31, 2021

CONFIDENTIAL



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### Education

Northwestern University,  
2002

PhD, Accounting  
Information and  
Management

ABD, Finance  
University of Southern  
California, 1995

MBA, Finance  
Bogazici University, 1993

BS, Electrical Engineering  
BS, Physics

### Certifications

CFA Charterholder

### Associations

American Accounting  
Association  
American Finance  
Association  
CFA Institute

### Regulatory Experience

#### US Securities & Exchange Commission

Washington, DC  
Senior Financial Economist  
Division of Risk Strategy and Financial Innovation (RiskFin, now DERA)

Led the economic analysis in SEC enforcement cases and rulemaking activities in disclosure, governance, accounting, corporate finance, asset-backed securities (ABS) and over-the-counter (OTC) derivatives, working with teams from all SEC divisions and other US and international regulatory organizations such as the CFTC, FED, CFPB and IOSCO; as the accounting and disclosure expert led the development of the Accounting Quality Model – SEC's quantitative tool for detecting accounting and disclosure violations; received "Distinguished Service Award" and "Law and Policy Award" for work on Dodd-Frank Act (DFA) implementation. RiskFin was created as the agency's "think tank" to provide sophisticated, interdisciplinary analysis across the entire spectrum of SEC activities, including policymaking, rulemaking, enforcement, and examinations.<sup>1</sup> Rulemaking activities included:

#### Title VII of the Dodd-Frank Act, Derivatives, and Derivatives Markets

- Analyzed, made recommendations, and drafted the economic impact of proposed rules related to OTC derivatives under Title VII of the DFA:
- Rules intended to address governance and conflicts of interest at security-based swap clearing agencies, security-based swap execution facilities, and exchanges that trade security-based swaps (DFA Sec. 765).<sup>2</sup>
- Rules regarding governance and recordkeeping at security-based swap data repositories (DFA Sec. 763(i)).<sup>3</sup>
- Rules governing mandatory clearing and end-user exceptions (DFA Sec. 763).<sup>4</sup>
- SRO rule change by clearing organization regarding the introduction of cross-margining of certain positions cleared at DTCC's Fixed Income Clearing Corporation and certain positions cleared at DTCC and NYSE Euronext joint venture New York Portfolio Clearing, LLC (FICC-2010-09).<sup>5</sup>
- Researched credit default swap (CDS) and other security-based swap markets using the entire trading history collected in the DTCC Trade Information Warehouse and presented results to SEC divisions, Chairman, Commissioners, and senior officers; collaborated with economists from other national securities regulators on the joint IOSCO research report on CDS markets.<sup>6</sup>

<sup>1</sup> <http://www.sec.gov/news/digest/2010/dig111810.htm>

<sup>2</sup> <http://www.sec.gov/rules/proposed/2010/34-63107.pdf>

<sup>3</sup> <http://www.sec.gov/rules/proposed/2010/34-63347.pdf>

<sup>4</sup> <http://www.sec.gov/rules/proposed/2010/34-63556.pdf>

<sup>5</sup> <http://www.sec.gov/rules/sro/ficc/2011/34-63986.pdf>

<sup>6</sup> <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD385.pdf>

## Financial Reporting and Disclosure

- As the financial reporting and disclosure expert, led the development and implementation of the Accounting Quality Model, an analytical algorithm detecting accounting and disclosure manipulation, sometimes referred to as the RoboCop by the media.<sup>7</sup> Algorithm helped evaluate accounting and disclosure quality and the likelihood of fraud by taking into account corporate earnings, analyst earnings forecasts, cash flows, accruals, and disclosures together with firm-specific and industry-specific factors; worked with filing review teams in the Division of Corporate Finance and the Division of Enforcement to shape key features.
- Examined the potential consequences of the possible adoption of the IFRS for the “Final SEC Staff Report under the Work Plan for the Consideration of Incorporating IFRS into the Financial Reporting System for U.S. Issuers”.<sup>8</sup>
- Performed the economic analyses of governance and disclosure rules related to
  - reporting of proxy votes on executive compensation and other matters by investment managers<sup>9</sup>
  - executive compensation disclosures under Dodd-Frank Section 953 and shareholder approval of executive compensation and golden parachute compensation<sup>10</sup>
  - beneficial ownership reporting<sup>11</sup>
  - the presentation of liquidity and capital resources in management’s discussion and analysis<sup>12</sup>
  - short-term borrowing disclosures<sup>13</sup>
  - broker-dealer custody under Dodd-Frank Act amendments to the Sarbanes-Oxley Act<sup>14</sup>
  - application of the International Financial Reporting Standards (“IFRS”) true-and-fair (substance-over-form) override in IAS 1 by foreign private issuers.
- Provided economic analyses of costs and benefits of standards being promulgated by other regulators including the PCAOB (e.g. communications with audit committees) and the FASB (e.g. leases).

## Asset-backed Securities

- Analyzed, made recommendations, and drafted the economic impact of proposed rules related to securitizations and ABS:
  - Rules governing conflicts of interest in ABS offerings (DFA Sec. 621).<sup>15</sup>
  - Rules governing risk retention by sponsors of ABS (DFA Sec. 941).<sup>16</sup>
  - Rules governing ABS shelf eligibility conditions and removing references to credit ratings (Reg AB).<sup>17</sup>
  - Rules governing issuer due diligence in ABS offerings (DFA Sec. 945).<sup>18</sup>
  - Rules governing disclosure of representations and warranties in ABS offerings (DFA Sec. 943).<sup>19</sup>
- SRO rule change by clearing organization regarding guaranteed settlement and central counterparty services for MBS transactions (FICC-2008-01).<sup>20</sup>

<sup>7</sup> <https://www.forbes.com/sites/janetnovack/2013/08/09/how-secs-new-robocop-profiles-companies-for-accounting-fraud/#471359f012d1>.

<sup>8</sup> <http://www.sec.gov/spotlight/.../ifrs-work-plan-final-report.pdf>.

<sup>9</sup> <https://www.sec.gov/rules/proposed/2010/34-63123.pdf>.

<sup>10</sup> <https://www.sec.gov/rules/final/2015/33-9877.pdf> and <https://www.sec.gov/rules/proposed/2010/33-9153.pdf>.

<sup>11</sup> <https://www.sec.gov/rules/final/2011/34-64628.pdf>.

<sup>12</sup> <http://www.sec.gov/rules/interp/2010/33-9144.pdf>.

<sup>13</sup> <http://www.sec.gov/rules/proposed/2010/33-9143.pdf>.

<sup>14</sup> <https://www.sec.gov/rules/proposed/2011/34-64676.pdf>.

<sup>15</sup> <http://www.sec.gov/rules/proposed/2011/34-65942.pdf>.

<sup>16</sup> <http://www.sec.gov/rules/proposed/2011/34-64148.pdf>.

<sup>17</sup> <http://www.sec.gov/rules/proposed/2011/33-9244.pdf>.

<sup>18</sup> <http://www.sec.gov/rules/final/2011/33-9176.pdf>.

<sup>19</sup> <http://www.sec.gov/rules/final/2011/33-9175.pdf>.

<sup>20</sup> <http://www.sec.gov/rules/sro/ficc/2012/34-66550.pdf>.

- Researched risk retention practices in ABS; briefed SEC Commissioners and senior officers on matters related to ABS; represented the SEC in interagency projects.

### Academic Employment

Robert H. Smith School of Business, University of Maryland, College Park, MD  
Adjunct Professor of Accounting (concurrent), August 2015 – June 2020

Columbia Business School, Columbia University, New York, NY  
Visiting Assistant Professor of Accounting (full time), July 2008 – June 2010

Marshall School of Business, University of Southern California, Los Angeles, CA  
Assistant Professor of Accounting (full time), July 2003 – June 2008

Rotman School of Management, University of Toronto, Toronto, Canada  
Assistant Professor of Accounting (full time), July 2002- June 2003

Kellogg School of Management, Northwestern University, Evanston, IL  
Lecturer in Finance, June 1998 - December 1998

### Publications

- *The economic impact of Dodd-Frank: The case of collateralized loan obligations*, Westlaw Journal Derivatives, Volume 20, Issue 23, October 10, 2014.
- *How will Halliburton affect securities class action defense?* Westlaw Journal Corporate Officers and Directors Liability, Volume 30, Issue 3, August 11, 2014 (with H. David Kotz).
- *An economic analysis of the SEC's ABS risk-retention rule re-proposal*, Westlaw Journal Securities Litigation and Regulation, Volume 19, Issue 15, November 22, 2013.
- *An Examination of the Impact of the Sarbanes-Oxley Act on the Attractiveness of US Capital Markets for Foreign Firms*, The Review of Accounting Studies, 2013, Vol. 18, Issue 2, pp. 522-559 (with P. Hostak, T. Lys, and G. Yang).<sup>21</sup>
- *Was the Sarbanes-Oxley Act Good News for Corporate Bondholders?* Accounting Horizons 2011, 25(3): 465-485 (with M. DeFond, M. Hung, and J. Zhang).<sup>22</sup>
- *Regulatory Capital and Earnings Management in Banks: The Case of Loan Sales and Securitizations*. FDIC Center for Financial Research, Paper No. 2005-05.<sup>23</sup>
- *Economic Consequences of Accounting Fraud: Benchmarking against the Performance of Scandal Firms*. (with T. Sandino and R. Beatty; working paper presented at 2007 AAA Management Accounting and Financial Accounting Sections Midyear, and AAA Annual Meetings).<sup>24</sup>
- *The Market Reaction to the Sarbanes-Oxley Act: Cost of the Act for Past or Future Misbehaviour?* (working paper presented at 2010 AAA Forensic Accounting Section Midyear Meeting).

### Trial and Deposition Testimony in Federal and State Matters:

- Federal Depository Insurance Corporation v. Bank of America, N.A., U.S. District Court for the District of Columbia: 1:17-CV-36.
- Fiduciary Network LLC. v Mark P. Hurley, U.S. District Court for the Southern District of New York, 1:19-cv-00379.

<sup>21</sup> [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=956020](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956020).

<sup>22</sup> <http://aaajournals.org/doi/abs/10.2308/acch-50008?journalCode=acch>.

<sup>23</sup> [http://www.fdic.gov/bank/analytical/cfr/2005/wp2005/CFRWP\\_2005\\_05\\_Karaoglu.pdf](http://www.fdic.gov/bank/analytical/cfr/2005/wp2005/CFRWP_2005_05_Karaoglu.pdf).

<sup>24</sup> [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=930749](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=930749).

- Keyes Law Firm, LLC. v. Napoli Bern Ripka Shkolnik, LLP, et al., U.S. District Court for the District of Maryland, Case No.: 1:17-cv-02972.
- Daniel Schlaepfer, Select Vantage Incorporated Company, Plaintiffs, vs. Australian Securities and Investment Commission, Greg Yanco, Defendants, Supreme Court of New South Wales Proceedings No: 2016/302827.
- United States of America v. Andre Flotron, U.S. District Court for the District of Connecticut, Case No. 3:17CR220.
- Public Prosecutor vs. Tan Bee Hong, Tan Bee Geok, In the Session Court at Kuala Lumpur, In the Federal Territory of Malaysia, Arrest Case No. 62-(04 – 05) – 12/2014.
- One confidential arbitration.

#### **Research Presentations and Discussions**

- American Accounting Association (AAA) Annual Meetings, 2002, 2005, 2006, 2012.
- University of Texas, Dallas, 2011.
- US Securities and Exchange Commission (SEC), 2010, 2011.
- Public Company Accounting Oversight Board (PCAOB), 2010.
- Columbia University, 2007.
- European Financial Management Association Meetings, 2007.
- Journal of Accounting Research Conference, 2007.
- AAA Financial Accounting and Reporting Section Midyear Meeting, 2005, 2006, 2007.
- Washington University, 2002, 2007.
- Journal of Financial Services Research Conference, Risk Transfer and Governance in Banking, 2004.
- FDIC Center for Financial Research Workshop on Banking and the Economy, 2004.
- AAA Western Region Meeting, 2004.
- Baruch College, 2003.
- Southern Methodist University, 2003.
- State University of New York at Buffalo, 2003.
- University of Chicago, 2002.
- Indiana University, 2002.
- Northwestern University, 2002.
- University of Toronto, 2002.
- University of Washington, 2002.
- University of California, Berkeley, 2002.

#### **Academic Service**

##### **Adhoc Reviewer:**

- Review of Financial Studies
- Journal of Financial Services Research
- Journal of Accounting and Economics

- Journal of Accounting and Public Policy
- Hong Kong Research Council
- Canadian Council of Social Sciences Research (SSHRC)
- American Accounting Association (AAA) Financial Accounting and Reporting Section Meetings
- AAA Annual Meetings
- AAA Western Annual Meetings

**Exhibit 2****Materials Relied Upon**

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Graham, John R., Roni Michaely, and Michael R. Roberts, "Do Price Discreteness and Transactions Costs Affect Stock Returns? Comparing Ex-dividend Pricing Before and After Decimalization," <i>Journal of Finance</i> , 2003, 58(6), pp. 2611-2635
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#### **Books**

Francotte, Pierre, “Chapter 10: Clearing and Settlement of Book-Entry Securities Transactions,” International Monetary Fund, *Current Developments in Monetary and Financial Law, Vol. 1*, 1999

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#### **Docket Entries**

Amended Complaint, *Skatteforvaltningen v. Basalt Ventures LLC Roth 401(k) Plan, et al.*, No. 19-cv-01866 (ECF No. 55)

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Letter Addressed to Judge Lewis A. Kaplan, *In re Customs and Tax Administration of the Kingdom of Denmark (Skatteforvaltningen) Tax Refund Scheme Litigation*, No. 18-md-02865 (ECF Nos. 651, 651-1, 651-2, 651-3, 651-4, 651-5, 651-6)

Letter Addressed to Judge Lewis A. Kaplan, *In re Customs and Tax Administration of the Kingdom of Denmark (Skatteforvaltningen) Tax Refund Scheme Litigation*, No. 18-md-02865 (ECF Nos. 660, 660-1)

Sanjay Shah Defendants’ Response to Claimant’s Request Dated 4 June 2019 for Further Information Under CPR 18, *In re Customs and Tax Administration of the Kingdom of Denmark (Skatteforvaltningen) Tax Refund Scheme Litigation*, No. 18-md-02865 (ECF No. 563-4)

#### **Depositions**

Richard Markowitz Deposition (Vols. 1 & 2) and Exhibits

Robert Klugman Deposition and Exhibits

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A.P. Moller - Maersk, "Proposal for Issuance of Bonus Shares and for Election of New Members for the Board of Directors," February 27, 2014
A.P. Moller - Maersk, Annual Report 2013, <i>available at</i> <a href="https://investor.maersk.com/static-files/f9126c88-9da0-4b11-8960-a70056e5b5d8">https://investor.maersk.com/static-files/f9126c88-9da0-4b11-8960-a70056e5b5d8</a> (last accessed on December 27, 2021)
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Chr. Hansen, Annual Report 2013/14, <i>available at</i> <a href="https://www.chr-hansen.com/en/investors/reports-and-presentations">https://www.chr-hansen.com/en/investors/reports-and-presentations</a> (last accessed on December 28, 2021)
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Clearstream, "Market Standards for Corporate Actions Processing," Revised version 2012 (Updated 2015), <i>available at</i> <a href="https://www.clearstream.com/resource/blob/1292816/c8d2a31466a8202f48a8585d11830787/market-standards-ca-data.pdf">https://www.clearstream.com/resource/blob/1292816/c8d2a31466a8202f48a8585d11830787/market-standards-ca-data.pdf</a> (last accessed on December 28, 2021)
Danmarks Nationalbank, "Assessment of the V.P. Settlement System," March 2012, <i>available at</i>

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93	WH_MDL_00020216	WH_MDL_00020837
SKAT_MDL_001_001341	WH_MDL_00020224	WH_MDL_00020840
20	WH_MDL_00020232	WH_MDL_00020881
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20	WH_MDL_00020263	WH_MDL_00020883
SKAT_MDL_001_001361	WH_MDL_00020283	WH_MDL_00020884
23	WH_MDL_00020284	WH_MDL_00020886
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SKAT_MDL_001_004718	WH_MDL_00020463	WH_MDL_00020927
82	WH_MDL_00020472	WH_MDL_00020936
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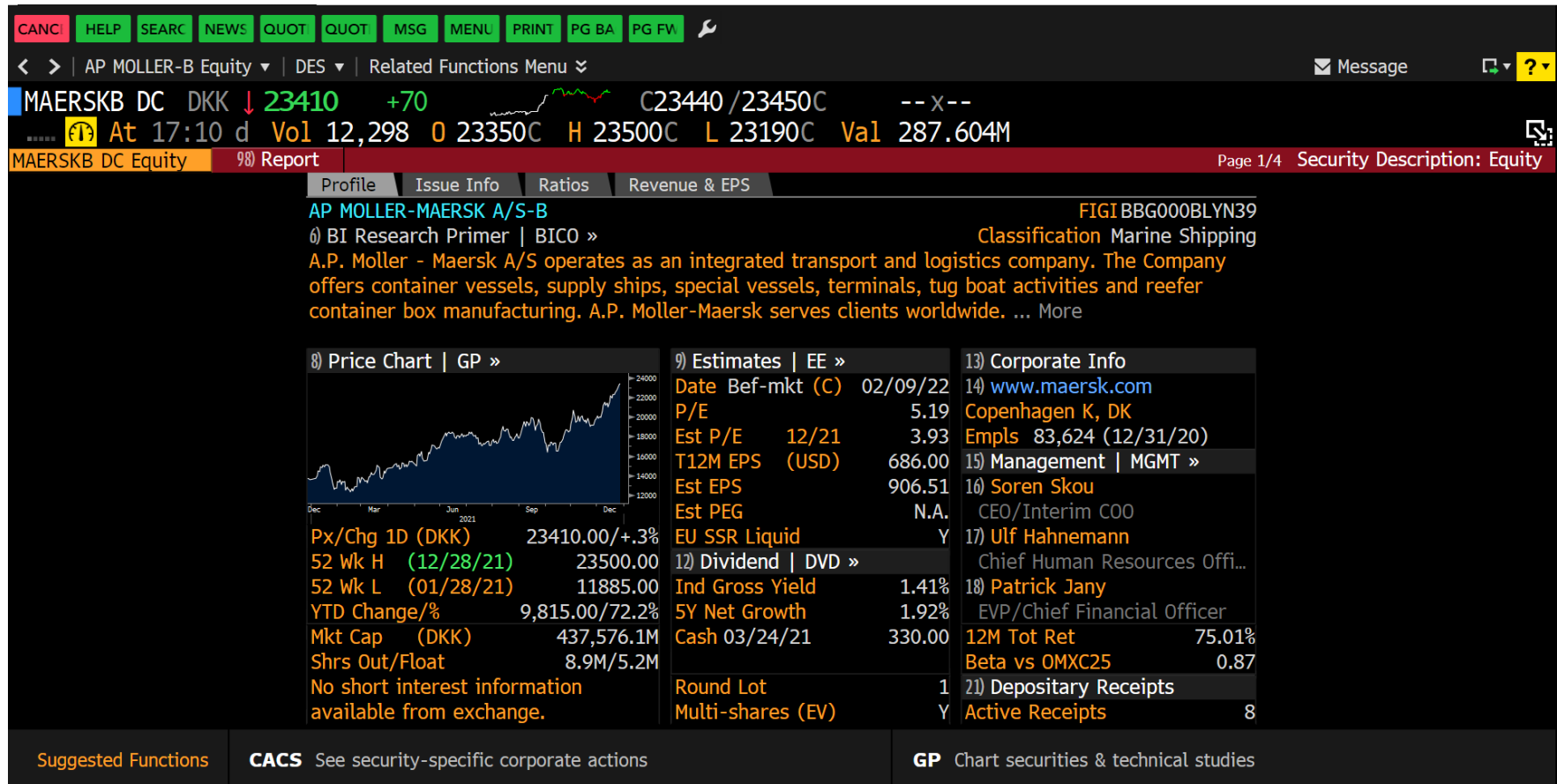
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WH_MDL_00047969	WH_MDL_00048456	WH_MDL_00065568
WH_MDL_00047975	WH_MDL_00048457	WH_MDL_00065588
WH_MDL_00048172	WH_MDL_00048458	WH_MDL_00065626
WH_MDL_00048187	WH_MDL_00048466	WH_MDL_00065920
WH_MDL_00048250	WH_MDL_00048490	WH_MDL_00066647
WH_MDL_00048251	WH_MDL_00048528	WH_MDL_00066663
WH_MDL_00048252	WH_MDL_00048607	WH_MDL_00066876
WH_MDL_00048253	WH_MDL_00048608	WH_MDL_00070688
WH_MDL_00048254	WH_MDL_00048609	WH_MDL_00072008
WH_MDL_00048255	WH_MDL_00048610	WH_MDL_00075304
WH_MDL_00048256	WH_MDL_00048612	WH_MDL_00076410
WH_MDL_00048257	WH_MDL_00048613	WH_MDL_00077940
WH_MDL_00048258	WH_MDL_00048679	WH_MDL_00079470
WH_MDL_00048259	WH_MDL_00048680	WH_MDL_00087999
WH_MDL_00048260	WH_MDL_00048681	WH_MDL_00089027
WH_MDL_00048261	WH_MDL_00048688	WH_MDL_00089352
WH_MDL_00048291	WH_MDL_00049794	WH_MDL_00089466
WH_MDL_00048292	WH_MDL_00050004	WH_MDL_00089470

WH_MDL_00096775	WH_MDL_00137241
WH_MDL_00096775	WH_MDL_00137250
WH_MDL_00099237	WH_MDL_00139999
WH_MDL_00105221	WH_MDL_00140008
WH_MDL_00105269	WH_MDL_00140010
WH_MDL_00115338	WH_MDL_00162577
WH_MDL_00115339	WH_MDL_00195286
WH_MDL_00115340	WH_MDL_00219538
WH_MDL_00115341	WH_MDL_00268439
WH_MDL_00115342	WH_MDL_00268445
WH_MDL_00115343	WH_MDL_00268446
WH_MDL_00115347	WH_MDL_00268449
WH_MDL_00115348	WH_MDL_00268452
WH_MDL_00115349	WH_MDL_00268458
WH_MDL_00117551	WH_MDL_00268462
WH_MDL_00125016	WH_MDL_00268468
WH_MDL_00125678	WH_MDL_00268472
WH_MDL_00128954	WH_MDL_00268476
WH_MDL_00128963	WH_MDL_00268480
WH_MDL_00128969	WH_MDL_00268481
WH_MDL_00128978	WH_MDL_00268485
WH_MDL_00128983	WH_MDL_00268486
WH_MDL_00128986	WH_MDL_00268494
WH_MDL_00128992	WH_MDL_00268502
WH_MDL_00128995	WH_MDL_00312208
WH_MDL_00128996	WH_MDL_00326543
WH_MDL_00128999	WH_MDL_00326544
WH_MDL_00129002	WH_MDL_00326545
WH_MDL_00129005	WH_MDL_00326546
WH_MDL_00129012	WH_MDL_00326547
WH_MDL_00129016	WH_MDL_00326548
WH_MDL_00129024	WH_MDL_00326549
WH_MDL_00129028	WH_MDL_00326550
WH_MDL_00129032	WH_MDL_00326553
WH_MDL_00129037	WH_MDL_00326555
WH_MDL_00129041	WH_MDL_00326557
WH_MDL_00129041	WH_MDL_00361287
WH_MDL_00129042	WH_MDL_00361293
WH_MDL_00129046	WH_MDL_00361299
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WH_MDL_00129058	
WH_MDL_00136875	
WH_MDL_00136923	



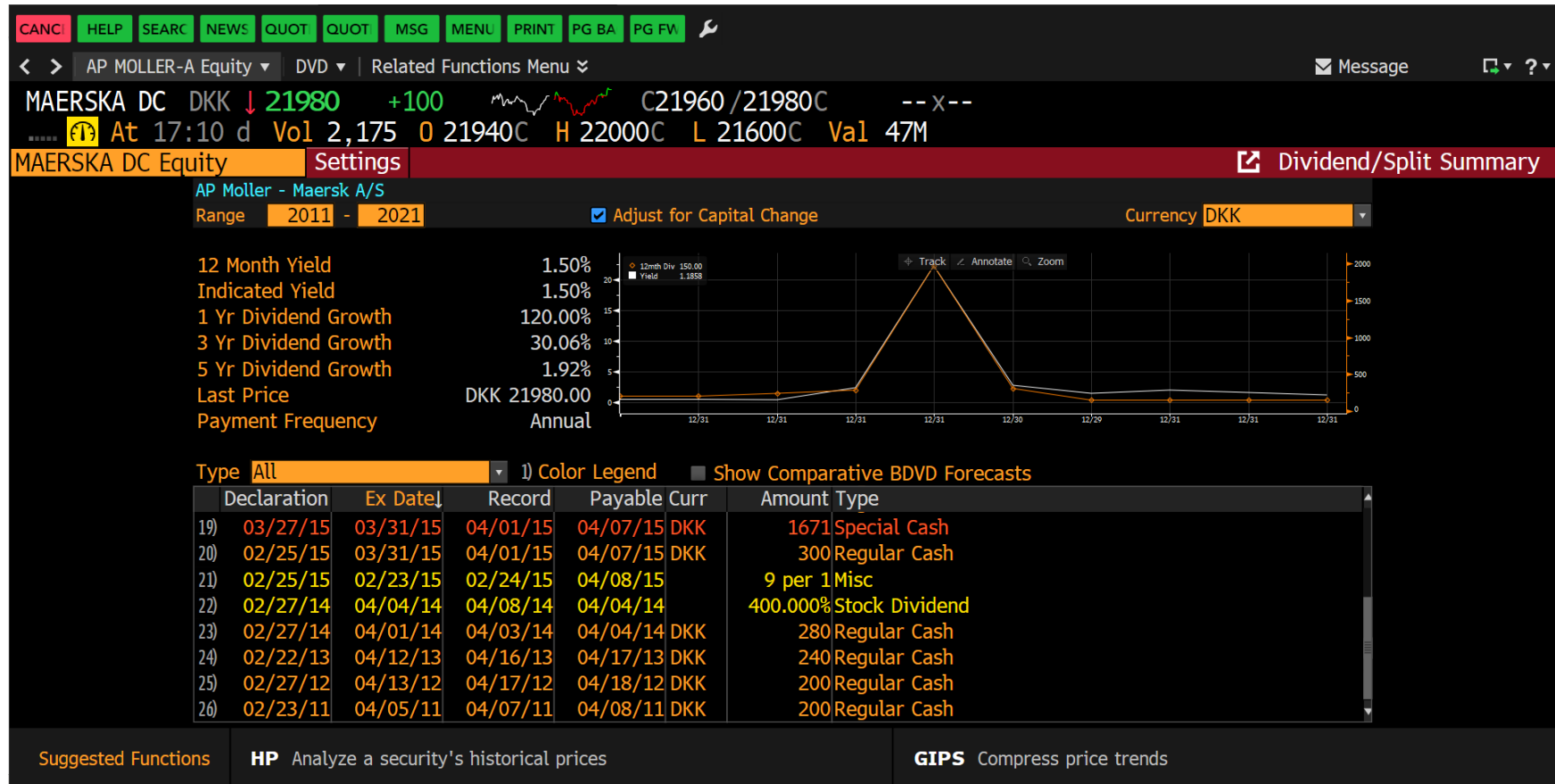
## Exhibit 3

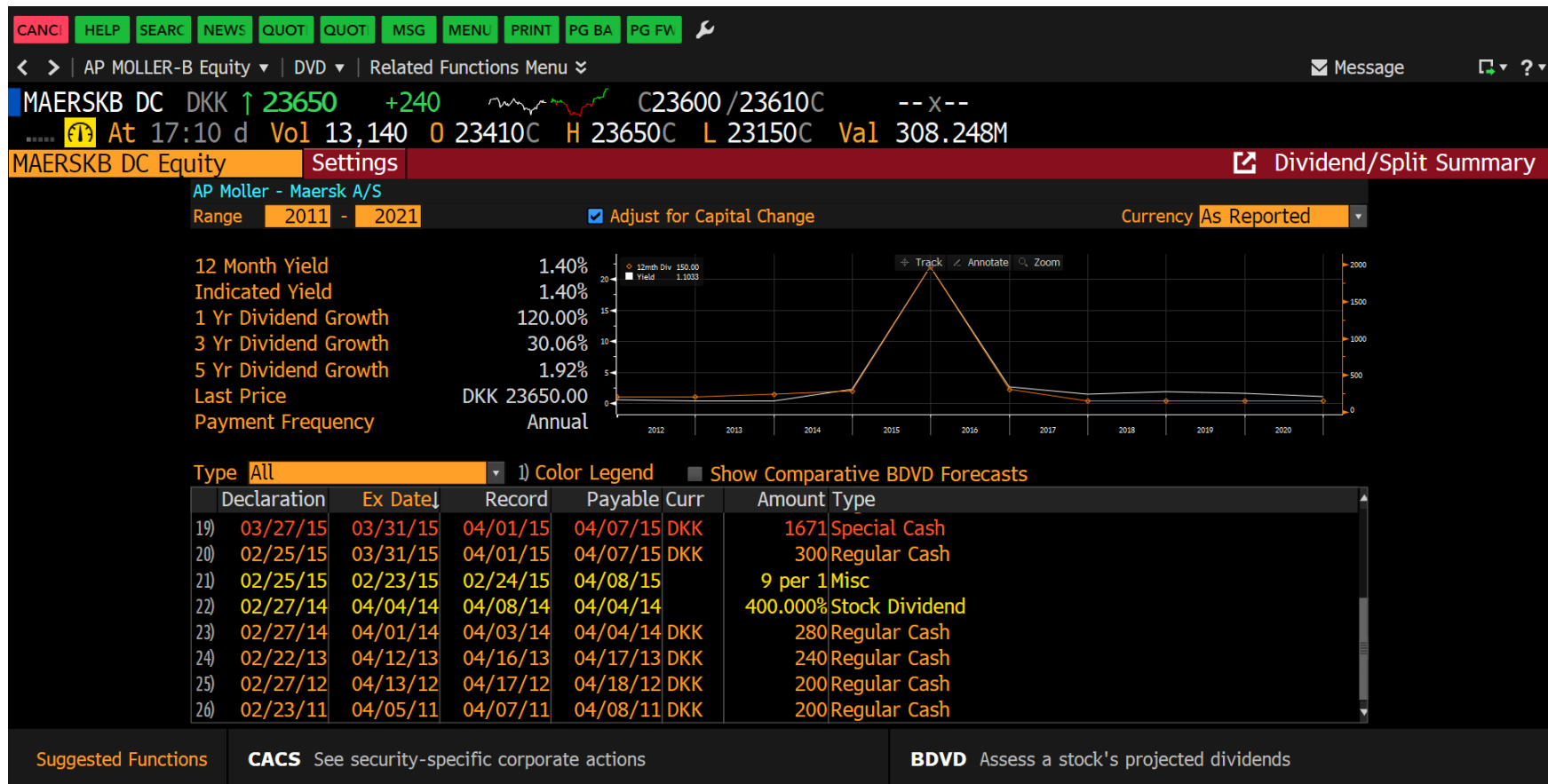
## A.P. Moller-Maersk A/S Class B Shares Description



## Exhibit 4

## Dividend per Share for A.P. Moller-Maersk A/S Class A and B Shares





## Exhibit 5

## A.P. Moller-Maersk A/S Class B Shares Outstanding, 2013



### DKK-USD Exchange Rate, December 31, 2013

CANC

HELP

SEARC

NEWS

QUOT

QUOT

MSG

MENU

PRINT

PG BA

PG FV

<

>

DKK-USD X-RATE Curncy

HP

Related Functions Menu

Message

?

DKKUSD

↑ .1527

+ .0006

BGN .1527 / .1527

BGN

🕒

At 22:29

Op .1521

Hi .1529

Lo .1516

Close .1521

Value 01/03/22

DKKUSD BGN Curncy

Export

Settings

Page 1/1

Historical Price Table

DKK-USD X-RATE

Range

11/29/2013

-

12/31/2013

Period

Daily

Market

Last Price

Currency

USD

View

Price Table

Source

BGN

High

.1850

on

12/30/13

Low

.1815

on

12/02/13

Average

.1836

Net Chg

.0020

1.10%

Date	Last Price	Date	Last Price	Date	Last Price
Fr 01/03/14		Fr 12/13/13	.1842		
Th 01/02/14		Th 12/12/13	.1843		
We 01/01/14		We 12/11/13	.1848		
Tu 12/31/13	.1842	Tu 12/10/13	.1845		
Mo 12/30/13	.1850	Mo 12/09/13	.1842		
Fr 12/27/13	.1843	Fr 12/06/13	.1837		
Th 12/26/13	.1835	Th 12/05/13	.1832		
We 12/25/13	.1834	We 12/04/13	.1822		
Tu 12/24/13	.1834	Tu 12/03/13	.1822		
Mo 12/23/13	.1836	Mo 12/02/13	.1815		
Fr 12/20/13	.1833	Fr 11/29/13	.1822		
Th 12/19/13	.1831				
We 12/18/13	.1834				
Tu 12/17/13	.1845				

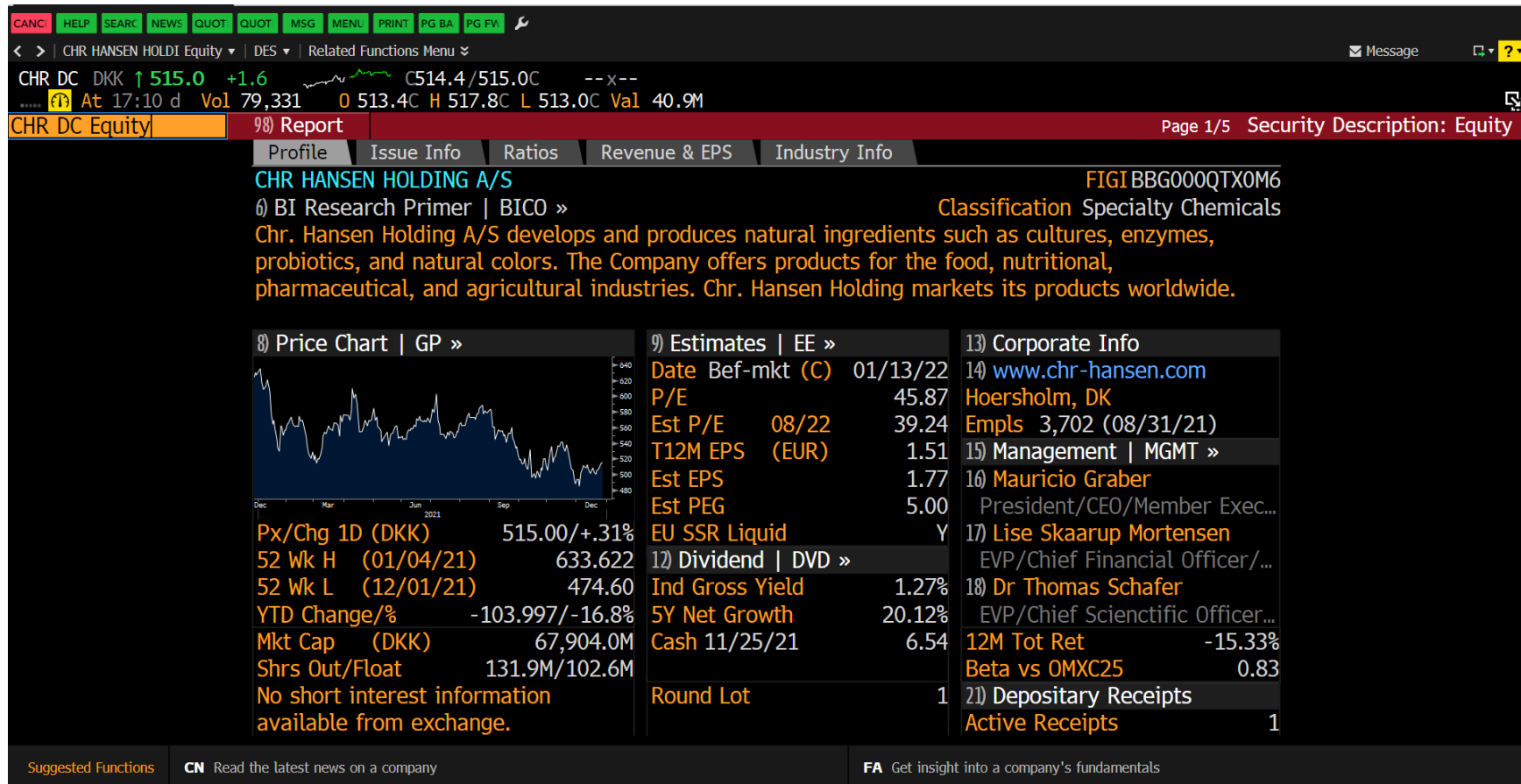
Suggested Functions

FRD Price FX forwards

BFIK Get FX benchmark rates

## Exhibit 7

## Chr. Hansen Shares Description



## Exhibit 8

### A.P. Moller-Maersk A/S Class B Shares and Chr. Hansen Shares were Listed on the Copenhagen Exchange

<div> <div>CANC</div> <div>HELP</div> <div>SEARC</div> <div>NEWS</div> <div>QUOT</div> <div>QUOT</div> <div>MSG</div> <div>MENU</div> <div>PRINT</div> <div>PG BA</div> <div>PG FV</div> <div></div> </div> <div> <div>&lt;</div> <div>&gt;</div> <div>AP MOLLER-B Equity ▾</div> <div>DES ▾</div> <div>Related Functions Menu ▾</div> <div>Message</div> <div>?</div> </div>									
<div> <div>MAERSKB DC DKK</div> <div>↓ 23410</div> <div>+70</div> <div>C23440 / 23450C</div> <div>-- X--</div> </div> <div> <div>At 17:10 d</div> <div>Vol 12,298</div> <div>0 23350C</div> <div>H 23500C</div> <div>L 23190C</div> <div>Val 287.604M</div> </div>									
<div> <div>MAERSKB DC Equity</div> <div>Report</div> <div>Page 2/4</div> <div>Security Description: Equity</div> </div>									
<div> <div>Profile</div> <div>Issue Info</div> <div>Ratios</div> <div>Revenue &amp; EPS</div> </div>									
<div> <div>6) Public Offerings   CACS »</div> <div>7) More</div> <div>8) Inst Holdings   OWN »</div> </div>									
<div> <div>Date</div> <div>Shares</div> <div>Price</div> <div>Lead Manager</div> <div># of Inst. Owners</div> <div>616</div> </div>									
<div> <div>03/12/2014</div> <div>38.90k DKK</div> <div>58000...</div> <div>F C Danske Bank</div> <div>Shares Owned</div> <div>5.2M</div> </div>									
<div> <div>03/12/2014</div> <div>20.80k DKK</div> <div>62000...</div> <div>F C Danske Bank</div> <div>Shares Out/Float</div> <div>58.4%/38.9%</div> </div>									
<div> <div>09/08/2009</div> <div>250.00k DKK</div> <div>33000...</div> <div>F C</div> <div># of Buyers/Sellers</div> <div>187/204</div> </div>									
<div> <div>Shares Bought</div> <div>3.08M</div> </div>									
<div> <div>9) Issue Information   RELS »</div> <div>10) Eq Wgts   WGT »</div> <div>11) Insider Holdings   OWN »</div> </div>									
<div> <div>Sec Type</div> <div>Common Stock</div> <div>21) SXXP</div> <div>N.A.</div> <div>% Held by Insiders</div> <div>N.A.</div> </div>									
<div> <div>Pri Exch</div> <div>Copenhagen</div> <div>PAR</div> <div>DKK</div> <div>1k</div> <div>22) SXNP</div> <div>N.A.</div> <div>Net Change Last 6M</div> <div>N.A.</div> </div>									
<div> <div>Pri MIC</div> <div>XCSE</div> <div>Lcl Mic</div> <div>XCSE</div> <div>23) OMXC25</div> <div>N.A.</div> </div>									
<div> <div>Incorp</div> <div>DENMARK</div> <div>24) MSPE</div> <div>0.226%</div> </div>									
<div> <div>FIGI</div> <div>BBG000BLYN39</div> <div>25) KFX</div> <div>N.A.</div> </div>									
<div> <div>ISIN</div> <div>DK0010244508</div> <div>26) WORLD</div> <div>0.016%</div> </div>									
<div> <div>SEDOL1</div> <div>4253048 DK</div> <div>WPK #</div> <div>861837</div> <div>27) SXXPESGX</div> <div>N.A.</div> </div>									
<div> <div>Common</div> <div>008728569</div> <div>Sicovam</div> <div>928703</div> <div>28) LCXP</div> <div>N.A.</div> </div>									
<div> <div>29) SPGLOB</div> <div>N.A.</div> </div>									
<div> <div>30) KAX</div> <div>N.A.</div> </div>									
<div> <div>13) Option   OMON »</div> <div>Options Available</div> </div>									
<div> <div>12) Top Holders   HDS »</div> <div>as of 12/27/2021</div> </div>									
<div> <div>AP MOLLER HOLDINGS AS</div> <div>30.80%</div> </div>									
<div> <div>AP MOLLER - MAERSK A/S</div> <div>6.08%</div> </div>									
<div> <div>AP MOLLER C MCKINNEY ...</div> <div>4.94%</div> </div>									
<div> <div>NORGES BANK GOVERNMENT ...</div> <div>2.40%</div> </div>									
<div> <div>VANGUARD GROUP INC</div> <div>2.05%</div> </div>									
<div> <div>BLACKROCK</div> <div>1.67%</div> </div>									
<div> <div>FMR LLC</div> <div>1.02%</div> </div>									
<div> <div>Suggested Functions</div> <div>CACS See security-specific corporate actions</div> <div>GP Chart securities &amp; technical studies</div> </div>									



<div> <div>CANC</div> <div>HELP</div> <div>SEAR</div> <div>NEWS</div> <div>QUOT</div> <div>QUOT</div> <div>MSG</div> <div>MENU</div> <div>PRINT</div> <div>PG BA</div> <div>PG FW</div> </div>									
<div> <div>&lt;</div> <div>&gt;</div> <div>CHR HANSEN HOLDI Equity ▾</div> <div>DES ▾</div> <div>Related Functions Menu ▾</div> <div>Message</div> <div>?</div> </div>									
<div> <div>CHR DC DKK ↑ 515.0 +1.6</div> <div>C514.4/515.0C -- X--</div> <div>At 17:10 d Vol 79,331 0 513.4C H 517.8C L 513.0C Val 40.9M</div> </div>									
<div> <div>CHR DC Equity</div> <div>98) Report</div> <div>Page 2/5 Security Description: Equity</div> </div>									
<div> <div>Profile</div> <div>Issue Info</div> <div>Ratios</div> <div>Revenue &amp; EPS</div> <div>Industry Info</div> </div>									
<div> <div>6) Public Offerings   CACS »</div> <div>7) More</div> <div>8) Inst Holdings   OWN »</div> </div>									
<div> <div> <div>Date</div> <div>Shares</div> <div>Price</div> <div>Lead Manager</div> </div> <div> <div>11/09/2018</div> <div>4.85M DKK</div> <div>625.00</div> <div>F C BofAML,GS</div> </div> <div> <div>11/17/2011</div> <div>15.00M DKK</div> <div>115.00</div> <div>F CGS,JPMCAZ</div> </div> <div> <div>01/13/2011</div> <div>25.00M DKK</div> <div>118.00</div> <div>F CCS,JPM</div> </div> <div> <div>06/03/2010</div> <div>61.35M DKK</div> <div>90.00</div> <div>I CCS,DANSKE,JPM,MORST...</div> </div> </div>									
<div> <div>9) Issue Information   RELS »</div> <div>10) Eq Wgts   WGT »</div> <div>11) Insider Holdings   OWN »</div> </div>									
<div> <div> <div>Sec Type</div> <div>Common Stock</div> </div> <div> <div>Pri Exch</div> <div>Copenhagen</div> <div>PAR</div> <div>DKK</div> <div>10</div> </div> <div> <div>Pri MIC</div> <div>XCSE</div> <div>Lcl Mic</div> <div>XCSE</div> </div> <div> <div>Incorp</div> <div>DENMARK</div> </div> </div>									
<div> <div> <div>FIGI</div> <div>BBG000QTX0M6</div> </div> <div> <div>ISIN</div> <div>DK0060227585</div> </div> </div>									
<div> <div> <div>SEDOL1</div> <div>B573M11 DK</div> <div>WPK #</div> <div>A1CZWD</div> </div> <div> <div>Common</div> <div>051436466</div> </div> </div>									
<div> <div> <div>21) SXXP</div> <div>N.A.</div> </div> <div> <div>22) BE500</div> <div>0.078%</div> </div> <div> <div>23) SXDP</div> <div>N.A.</div> </div> <div> <div>24) OMXC25</div> <div>N.A.</div> </div> <div> <div>25) KFX</div> <div>N.A.</div> </div> <div> <div>26) WORLD</div> <div>0.011%</div> </div> <div> <div>27) MCXP</div> <div>N.A.</div> </div> <div> <div>28) SXXPESGX</div> <div>N.A.</div> </div> <div> <div>29) SPGLOB</div> <div>N.A.</div> </div> <div> <div>30) KAX</div> <div>N.A.</div> </div> </div>									
<div> <div>13) Option   OMON »</div> <div>Options Available</div> </div>									
<div> <div> <div>% Held by Insiders</div> <div>0.04%</div> </div> <div> <div>Net Change Last 6M</div> <div>16.51%</div> </div> </div>									
<div> <div>12) Top Holders   HDS »</div> <div>as of 12/27/2021</div> </div>									
<div> <div> <div>NOVO AS</div> <div>21.98%</div> </div> <div> <div>CAPITAL GROUP COMPA...</div> <div>9.99%</div> </div> <div> <div>APG ASSET MANAGEMENT...</div> <div>5.01%</div> </div> <div> <div>BLACKROCK</div> <div>5.00%</div> </div> <div> <div>WCM INVESTMENT MANA...</div> <div>4.95%</div> </div> <div> <div>VANGUARD GROUP INC</div> <div>2.54%</div> </div> <div> <div>NORGES BANK GOVERN...</div> <div>1.95%</div> </div> </div>									
<div> <div>Suggested Functions</div> <div>CN Read the latest news on a company</div> <div>FA Get insight into a company's fundamentals</div> </div>									

**Exhibit 9****Red-Line Comparison of the Give-Up Agreement between FGC Securities, Solo Capital Partners LLP, and RJM Capital Pension Plan and the International Uniform Brokerage Execution Services ("Give-Up") Agreement Customer Version 2008 Template**

**Note:** In-text additions are per the Give-Up Agreement between FGC Securities, Solo Capital Partners LLP, and RJM Capital Pension Plan (MPSKAT00066947 – 951) and in-text strikethroughs are language per the International Uniform Brokerage Execution Services ("Give-Up") Agreement Customer Version 2008 Template. Formatting differences between the two are not identified.

**INTERNATIONAL UNIFORM BROKERAGE EXECUTION SERVICES ("GIVE-UP") AGREEMENT  
CUSTOMER VERSION 2008**

**CAUTION: THIS AGREEMENT IS DESIGNED AS A BASIC DOCUMENT FOR MARKET PARTICIPANTS ENGAGING IN "GIVE-UP" TRANSACTIONS. IT IS NOT INTENDED TO SERVE AS AN ALL ENCOMPASSING DOCUMENT FOR USE BY ALL PARTIES UNDER ALL CIRCUMSTANCES. PARTIES SHOULD CAREFULLY CONSIDER THE FULL SCOPE OF REGULATORY (INCLUDING EXCHANGE) AND COMMERCIAL TERMS THAT MAY BE APPLICABLE TO THEIR PARTICULAR CIRCUMSTANCES AND MAY ELECT TO ENTER INTO MORE DETAILED CUSTOMER AGREEMENTS AT THE OUTSET OR DURING THE COURSE OF THEIR RELATIONSHIP.**

Agreement made this \_ day of \_\_\_, 20\_\_ by and among

<u>FGC Securities</u>	<u>("Executing Broker")</u>
<u>Solo Capital Partners LLP</u>	<u>("Clearing Broker")</u>
<u>RJM Capital Pension Plan</u>	<u>("Customer")</u>

1. All transactions executed orally, in writing or through an electronic order facility or cleared hereunder shall be subject to applicable laws, governmental, regulatory, self-regulatory, exchange or clearing house rules, regulations, interpretations, protocols and the customs and usages of the exchange or clearing house on which they are executed and cleared, as in force from time to time ("Applicable Law"). All disputes relating to transactions executed or cleared under this Agreement shall be governed by and settled pursuant to Applicable Law and shall be subject to the jurisdiction of the exchange (and, if applicable, its clearing house) upon which the dispute arises. The parties to this Agreement shall perform their respective obligations and exercise their respective rights under this Agreement (including, but not limited to, rejecting a Customer order, calling a Customer for margin or providing any notice specified herein) using commercially reasonable judgement, in a commercially reasonable manner under the circumstances, and consistent with Applicable Law.

2. Customer authorizes Executing Broker to execute orders for Customer as transmitted orally, in writing or through an electronic order facility by ~~Trader~~ Customer to Executing Broker, or, as permitted by Applicable Law, directly to an exchange. Executing Broker reserves the right to reject an order that ~~Trader may transmit to Executing Broker for execution and shall promptly notify Trader of any such rejection. Clearing Broker may, upon prior notice to Executing Broker and Trader, place limits or conditions on the positions it will accept for give-up for Customer's account. In the event this Agreement is executed on behalf of Customer by Trader, Trader hereby represents and warrants that Trader is expressly authorized by Customer to enter into this Agreement on Customer's behalf, and that this authorization will remain effective unless Customer or Trader provides prior written notice to Executing Broker and Clearing Broker. Customer may transmit to Executing Broker for execution and shall promptly notify Customer of any such rejection. Clearing Broker may, upon prior notice to Executing Broker and Customer, place limits or conditions on the positions it will accept for give-up for Customer's account.~~

3. Unless otherwise agreed in writing, each of the parties authorizes Executing Broker and Clearing Broker to use the services of one or more other persons or entities in connection with their obligations under this Agreement; provided, however, that Executing Broker and Clearing Broker remain responsible to Customer for the performance (or failure of performance) of their respective obligations and responsibilities under this Agreement.

4. Customer, whether placing orders orally, in writing or through an electronic order facility, will be responsible for accurate and valid placement of orders. Executing Broker, and not Clearing Broker, will be responsible for determining that all orders are placed or authorized by ~~Trader~~ Customer. Additionally, except as otherwise agreed in writing, Executing Broker will: (a) upon placement of ~~the order~~ orders by ~~Trader~~ Customer, confirm the terms of the ~~order~~ orders with ~~Trader~~ Customer if customary and practicable; (b) be responsible for the accurate execution of all orders; (c) confirm the execution of such orders to ~~Trader~~ Customer as soon as is practicable thereafter; and (d) transmit such executed orders to Clearing Broker as soon as practicable, but in no event later than the period mandated by Applicable Law. Subject to Section 2 herein, Clearing Broker shall be responsible for clearing all executed orders transmitted to Clearing Broker. Unless otherwise provided by Applicable Law, ~~none of neither~~ Executing Broker nor Clearing Broker

~~or Trader~~ shall be responsible or liable for losses or damages resulting from: (x) error, negligence or misconduct of Customer and/or exchange or clearing house; (y) failure of transmission, communication or electronic order facilities; or (z) any other cause or causes beyond their control.

5. Executing Broker will, where applicable, bill commissions for executing trades, as elected in Section 12 below. on a monthly basis. Customer or Clearing Broker, as elected in Section 12 below, shall be responsible for verifying billing and making payment. Clearing Broker will, where applicable, pay floor brokerage fees, as well as any exchange or clearing house fees, incurred for all transactions executed by Executing Broker for and on behalf of Customer and subsequently accepted by Clearing Broker.

6. In the event that TraderCustomer disputes or denies knowledge of any transaction, Clearing Broker or Executing Broker shall be authorized to liquidate or otherwise offset the disputed position. Where practicable, prior notice of such liquidation or offset shall be provided to the other parties to this Agreement.

7. In the event that Clearing Broker does not, for any reason, accept a trade transmitted to it by Executing Broker, Clearing Broker shall promptly notify ~~Trader~~ Customer and Executing Broker of such non-acceptance, and Executing Broker, or its designated clearing broker if applicable, shall at its option be entitled to:

(a) close out Customer's trade by such sale, purchase, disposal or other cancellation transaction as Executing Broker may determine, whether on the market, by private contract or any other appropriate method. Executing Broker shall promptly notify ~~Trader~~Customer of such close out Any balance resulting from such close out shall be promptly settled between Executing Broker and Customer; or

(b) transfer Customer's trades to another clearing broker as instructed by Customer; or ~~Trader; or~~

(c) clear Customer's trade in accordance with the following terms:

i. Customer shall be fully liable for any and all obligations arising out of or related to transactions entered into or carried in Customer's account by Executing Broker, including, but not limited to: 1) debit balances, 2) exchange or clearing house fees, and 3) brokerage, commissions, and applicable fees charged by Executing Broker;

ii. Executing Broker shall have the right to call Customer for margin in such amounts, in such form, by such time and in such manner as may be required by Executing Broker. If Customer fails to meet such margin call within such specified time, or if Executing Broker, in its discretion, otherwise deems it appropriate for Executing Broker's protection, Executing Broker may close out Customer's trade pursuant to sub-paragraph (a) above;

iii. Customer acknowledges that Customer's trades may be subject to exercise or delivery assignments, where applicable.

8. Customer acknowledges that all notices and disclosures that are provided by Clearing Broker to Customer (or Customer's representative) pursuant to Applicable Law, will be deemed, for purposes of Section 7 of this Agreement, as if received by Customer from Executing Broker as well as from Clearing Broker. Clearing Broker represents warrants and covenants to Executing Broker that it has provided, and will provide, all required notices and disclosures to Customer (or Customer's representative).

9. This Agreement may be terminated by any of the parties hereto upon prior written notice to the other parties. Any such termination shall have no effect upon any party's rights and obligations arising out of transactions executed prior to such termination.

10. This Agreement shall be exclusively governed by, and construed in accordance with, the laws of \_\_\_\_\_ the jurisdiction specified below without regard to principles of choice of law.

11. This Agreement shall not amend or vary any clearing or electronic services agreement between Clearing Broker and Customer or Executing Broker and ~~Trader and/or~~ Customer. In the event of a conflict between this Agreement and such other clearing or electronic services agreement with respect to the execution, clearing or carrying of Customer's trades, such other clearing or electronic services agreement will control with respect thereto.

12. Executing Broker, where applicable, will bill commissions per contract; per half turn; as specified on attached Addendum, rate schedule, or as separately agreed.

13. Each party consents to the electronic recording, without the use of an automatic warning tone, of all telephone conversations between or among the parties and their representatives.

14. Unless otherwise prohibited by Applicable Law, any party to this Agreement, from time to time, may add additional accounts of Customer to be governed by this Agreement by prior written notice (which may be by facsimile or other electronic transmission) to

the other parties, provided that ~~(i) Customer's authorized signatory is authorized to enter into and sign this Agreement on behalf of such accounts,~~ (i) the same fees agreed to herein apply, and (ii) valid clearing accounts for such accounts exist at the Clearing Broker.

~~Where this Agreement is executed by Trader on behalf of more than one Customer, it is understood and agreed that (i) this Agreement shall constitute a separate agreement with each such Customer, as if each such Customer had acknowledged and executed a separate Agreement naming only itself as the party thereto and (ii) no Customer shall have any liability under this Agreement for the obligations of any other Customer.~~

15. This Agreement may be executed and delivered in counterparts (including by facsimile or other electronic transmission), each of which will be deemed an original.

**Jurisdiction: England and Wales**

1 This Uniform Agreement was prepared in consultation with the FIA, FOA and MFA. Any party changes or additions to the wording of this standard document must be clearly indicated. Failure to do so constitutes a representation that the document is the International Uniform Brokerage Execution Services ("Give-Up") Agreement: Customer Version 2008 and has manually not been modified in any respect.

*Any party that has manually executed this Agreement represents, covenants and agrees that the version electronically executed by the other parties and stored on EGUS is the final version and sets forth the complete terms and conditions as agreed to by all of the parties.*

~~4. Conformed signatures were executed electronically in accordance with the FIA Electronic Give Up Agreement System User Agreement.~~

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective authorized officers as of the date set forth above.

~~[Name of Trader: on its own behalf, and unless Customer signs below, as Customer's authorized agent]~~

~~[Name of Clearing Broker]~~

By \_\_\_\_\_

By \_\_\_\_\_

~~[Print Name and Title]~~

~~[Print Name and Title]~~

~~If Trader is not authorized to sign on behalf of Customer, Customer hereby consents to be bound by this Agreement.~~

~~[Name of Executing Broker]~~

~~[Name of Customer]~~

By \_\_\_\_\_

By \_\_\_\_\_

~~[Print Name and Title]~~

~~[Print Name and Title]~~

Name of Executing Broker: FGC Securities LLC

By:

Name of Clearing Broker: Solo Capital Partners

LLP

By:

CONFORMED SIGNATURES WERE EXECUTED ELECTRONICALLY IN ACCORDANCE WITH THE FIA ELECTRONIC GIVE-UP AGREEMENT SYSTEM USER AGREEMENT

**ADDENDUM TO INTERNATIONAL UNIFORM BROKERAGE EXECUTION SERVICES ("GIVE-UP") AGREEMENT**  
MADE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

**CONTACT PERSONS**

*Any notices or problems regarding these transactions should immediately be brought to the attention of the contact persons of each of the parties hereto, whose names, addresses, and numbers are set forth below. Each party may change its operational contact by notice to the others.*

**Executing Broker**

**For Trading**

Name:

Name of Person:

Address:

Telephone No.:

Fax No.:

Email:

**For Documentation**

Name of Person:

Address:

Telephone No.:

Fax No.:

Email:

**Trader**

**For Trading:**

Name:

Name of Person:

Address:

Telephone No.:

Fax No.:

Email:

**For Documentation**

Name of Person:

Address:

Telephone No.:

Fax No.:

Email:

**CUSTOMER'S ACCOUNT** Customer's Account Number

*Customer's name and/or account number with Clearing Broker.*

**Account ID**

TBA

**Account Description**

**Effective Date**

**Expiration Date**

**BILLING ADDRESS**

*Invoices to be sent to the address set forth below.*

Name: Bill To Party Name: RJM Capital Pension Plan

Address: Select Country

Attention:

### EUR-DKK Exchange Rate, June 30, 2015

CANC

HELP

SEARCH

NEWS

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QUOT

MSG

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PG BA

PG FV

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>

EUR-DKK X-RATE Currency ▾

HP ▾

Related Functions Menu ▾

EURDKK

↑ 7.4367

+ .0007



BGN 7.4364 / 7.4369

BGN

🕒 At 20:48

Op 7.4359

Hi 7.4377

Lo 7.4359

Close 7.4359

Value 01/03/22

EURDKK Currency

Export

Settings

Page 1/1 Historical Price Table

EUR-DKK X-RATE

Range 06/01/2015 - 07/15/2015

Period Daily

Market Last Price

View Price Table

Currency DKK

Source BGN

High 7.4634 on 07/07/15

Low 7.4567 on 07/02/15

Average 7.4607

Net Chg .0031 0.04%

Date	Last Price	Date	Last Price	Date	Last Price
We 07/15/15	7.4616	We 06/24/15	7.4599	We 06/03/15	7.4602
Tu 07/14/15	7.4624	Tu 06/23/15	7.4618	Tu 06/02/15	7.4609
Mo 07/13/15	7.4631	Mo 06/22/15	7.4616	Mo 06/01/15	7.4585
Fr 07/10/15	7.4627	Fr 06/19/15	7.4606		
Th 07/09/15	7.4631	Th 06/18/15	7.4617		
We 07/08/15	7.4618	We 06/17/15	7.4580		
Tu 07/07/15 H	7.4634	Tu 06/16/15	7.4586		
Mo 07/06/15	7.4629	Mo 06/15/15	7.4588		
Fr 07/03/15	7.4616	Fr 06/12/15	7.4597		
Th 07/02/15 L	7.4567	Th 06/11/15	7.4592		
We 07/01/15	7.4606	We 06/10/15	7.4623		
Tu 06/30/15	7.4604	Tu 06/09/15	7.4604		
Mo 06/29/15	7.4609	Mo 06/08/15	7.4583		

Suggested Functions

FRD Price FX forwards

GIT View an intraday price table

**Exhibit 11****Red-Line Comparison of General Master Securities Lending Agreement between Colbrook Ltd and RJM Capital Pension Plan and the General Master Securities Lending Agreement (Version: January 2010) Template**

**Note:** In-text additions are per the General Master Securities Lending Agreement between Colbrook Ltd and RJM Capital Pension Plan (MPSKAT00070838 – 879) and in-text strikethroughs are language per the General Master Securities Lending Agreement (Version: January 2010) Template. Formatting differences between the two are not identified.

VERSION: JANUARY 2010

GLOBAL MASTER SECURITIES LENDING AGREEMENT

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**AGREEMENT****BETWEEN:**

**COLBROOK LTD** (*Party A*) a company incorporated under the laws of [the Cayman Islands](#), acting through one or more Designated Offices; and

**RJM CAPITAL PENSION PLAN** (*Party B*) a ~~company~~ pension plan incorporated under the laws of [the State of New York, United States of America](#), acting through one or more Designated Offices.

**1. APPLICABILITY**

1.1 From time to time the Parties acting through one or more Designated Offices may enter into transactions in which one party (**Lender**) will transfer to the other (**Borrower**) securities and financial instruments (**Securities**) against the transfer of Collateral (as defined in paragraph 2) with a simultaneous agreement by Borrower to transfer to Lender Securities equivalent to such Securities on a fixed date or on demand against the transfer to Borrower by Lender of assets equivalent to such Collateral. 1.2 Each such transaction shall be referred to in this Agreement as a **Loan** and shall be governed by the terms of this Agreement, including the supplemental terms and conditions contained in the Schedule and any Addenda or Annexes attached hereto, unless otherwise agreed in writing. In the event of any inconsistency between the provisions of an Addendum or Annex and this Agreement, the provisions of such Addendum or Annex shall prevail unless the Parties otherwise agree. 1.3 Either Party may perform its obligations under this Agreement either directly or through a Nominee.

**2. INTERPRETATION**

2.1 In this Agreement:

**Act of Insolvency** means in relation to either Party:

(a) its making a general assignment for the benefit of, or entering into a reorganisation, arrangement, or composition with creditors; or

(b) its stating in writing that it is unable to pay its debts as they become due; or

(c) its seeking, consenting to or acquiescing in the appointment of any trustee, administrator, receiver or liquidator or analogous officer of it or any material part of its property; or

(d) the presentation or filing of a petition in respect of it (other than by the other Party to this Agreement in respect of any obligation under this Agreement) in any court or before any agency alleging or for the bankruptcy, winding-up or insolvency of such Party (or any analogous proceeding) or seeking any reorganisation, arrangement, composition, re-adjustment, administration, liquidation, dissolution or similar relief under any present or future statute, law or regulation, such petition not having been stayed or dismissed within 30 days of its filing (except in the case of a petition for winding-up or any Analogous proceeding in respect of which no such 30 day period shall apply); or

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(e) the appointment of a receiver, administrator, liquidator or trustee or analogous officer of such Party over all or any material part of such Party's property; or (f) the convening of any meeting of its creditors for the purpose of considering a voluntary arrangement as referred to in Section 3 of the Insolvency Act 1986 (or any analogous proceeding);

**Agency Annex** means the Annex to this Agreement published by the International Securities Lending Association and providing for Lender to act as agent for a third party in respect of one or more Loans;

**Alternative Collateral** means Collateral having a Market Value equal to the Collateral delivered pursuant to paragraph 5 and provided by way of substitution in accordance with the provisions of paragraph 5.3;

**Applicable Law** means the laws, rules and regulations (including double taxation conventions) of any relevant jurisdiction, including published practice of any government or other taxing authority in connection with such laws, rules and regulations;

**Automatic Early Termination** has the meaning given in paragraph 10.1(d);

**Base Currency** means the currency indicated in paragraph 2 of the Schedule;

**Business Day** means:

(a) in relation to Delivery in respect of any Loan, a day other than a Saturday or a Sunday on which banks and securities markets are open for business generally in the place(s) where the relevant Securities, Equivalent Securities, Collateral or Equivalent Collateral are to be delivered;

(b) in relation to any payments under this Agreement, a day other than a Saturday or a Sunday on which banks are open for business generally in the principal financial centre of the country of which the currency in which the payment is denominated is the official currency and, if different, in the place where any account designated by the Parties for the making or receipt of the payment is situated (or, in the case of a payment in euro, a day on which TARGET operates);

(c) in relation to a notice or other communication served under this Agreement, any day other than a Saturday or a Sunday on which banks are open for business generally in the place designated for delivery in accordance with paragraph 3 of the Schedule; and

(d) in any other case, a day other than a Saturday or a Sunday on which banks are open for business generally in each place stated in paragraph 6 of the Schedule;

**Buy-In** means any arrangement under which, in the event of a seller or transferor failing to deliver securities to the buyer or transferee, the buyer or transferee of such securities is entitled under the terms of such arrangement to buy or otherwise acquire securities equivalent to such securities and to recover the cost of so doing from the seller or transferor;

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**Cash Collateral** means Collateral taking the form of a transfer of currency;

**Close of Business** means the time at which the relevant banks, securities settlement systems or depositaries close in the business centre in which payment is to be made or Securities or Collateral is to be delivered;

**Collateral** means such securities or financial instruments or transfers of currency as are referred to in the table set out under paragraph 1 of the Schedule as being acceptable or any combination thereof as agreed between the Parties in relation to any particular Loan and which are delivered by Borrower to Lender in accordance with this Agreement and shall include Alternative Collateral;

**Defaulting Party** has the meaning given in paragraph 10;

**Delivery** in relation to any Securities or Collateral or Equivalent Securities or Equivalent Collateral comprising Securities means:

(a) in the case of Securities held by a Nominee or within a clearing or settlement system, the crediting of such Securities to an account of the Borrower or Lender, as the case may be, or as it shall direct, or,

(b) in the case of Securities otherwise held, the delivery to Borrower or Lender, as the case may be, or as the transferee shall direct of the relevant instruments of transfer, or

(c) by such other means as may be agreed,

and **deliver** shall be construed accordingly;

**Designated Office** means the branch or office of a Party which is specified as such in paragraph 6 of the Schedule or such other branch or office as may be agreed to in writing by the Parties;

**Equivalent or equivalent to** in relation to any Loaned Securities or Collateral (whether Cash Collateral or Non-Cash Collateral) provided under this Agreement means Securities or other property, of an identical type, nominal value, description and amount to particular Loaned Securities or Collateral (as the case may be) so provided. If and to the extent that such Loaned Securities or Collateral (as the case may be) consists of Securities that are partly paid or have been converted, subdivided, consolidated, made the subject of a takeover, rights of pre-emption, rights to receive securities or a certificate which may at a future date be exchanged for Securities, the expression shall include such Securities or other assets to which Lender or Borrower (as the case may be) is entitled following the occurrence of the relevant event, and, if appropriate, the giving of the relevant notice in accordance with paragraph 6.7 and provided that Lender or Borrower (as the case may be) has paid to the other Party all and any sums due in respect thereof. In the event that such Loaned Securities or Collateral (as the case may be) have been redeemed, are partly paid, are the subject of a capitalisation issue or are subject to an event similar to any of the foregoing events described in this paragraph, the expression shall have the following meanings:

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(a) in the case of redemption, a sum of money equivalent to the proceeds of the redemption;

(b) in the case of a call on partly paid Securities, Securities equivalent to the relevant Loaned Securities or Collateral, as the case may be, provided that Lender shall have paid Borrower, in respect of Loaned Securities, and Borrower shall have paid to Lender, in respect of Collateral, an amount of money equal to the sum due in respect of the call;

(c) in the case of a capitalisation issue, Securities equivalent to the relevant Loaned Securities or Collateral, as the case may be, together with the securities allotted by way of bonus thereon;

(d) in the case of any event similar to any of the foregoing events described in this paragraph, Securities equivalent to the Loaned Securities or the relevant Collateral, as the case may be, together with or replaced by a sum of money or Securities or other property equivalent to that received in respect of such Loaned Securities or Collateral, as the case may be, resulting from such event;

**Income** means any interest, dividends or other distributions of any kind whatsoever with respect to any Securities or Collateral;

**Income Record Date**, with respect to any Securities or Collateral, means the date by reference to which holders of such Securities or Collateral are identified as being entitled to payment of Income;

**Letter of Credit** means an irrevocable, non-negotiable letter of credit in a form, and from a bank, acceptable to Lender;

**Loaned Securities** means Securities which are the subject of an outstanding Loan;

**Margin** has the meaning specified in paragraph 1 of the Schedule with reference to the table set out therein;

**Market Value** means:

(a) in relation to the valuation of Securities, Equivalent Securities, Collateral or Equivalent Collateral (other than Cash Collateral or a Letter of Credit):

(i) such price as is equal to the market quotation for the mid price of such Securities, Equivalent Securities, Collateral and/or Equivalent Collateral as derived from a reputable pricing information service reasonably chosen in good faith by Lender; or

(ii) if unavailable the market value thereof as derived from the mid price or rate bid by a reputable dealer for the relevant instrument reasonably chosen in good faith by Lender, in each case at Close of Business on the previous Business Day, or as specified in the Schedule, unless agreed otherwise or, at the option of either Party where in its reasonable opinion there has been an exceptional movement in the price of the asset in question since such time, the latest available price, plus (in each case):

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(iii) the aggregate amount of Income which has accrued but not yet been paid in respect of the Securities, Equivalent Securities, Collateral or Equivalent Collateral concerned to the extent not included in such price, provided that the price of Securities, Equivalent Securities, Collateral or Equivalent Collateral that are suspended or that cannot legally be transferred or that are transferred or required to be transferred to a government, trustee or third party (whether by reason of nationalisation, expropriation or otherwise) shall for all purposes be a commercially reasonable price agreed between the Parties, or absent agreement, be a price provided by a third party dealer agreed between the Parties, or if the Parties do not agree a third party dealer then a price based on quotations provided by the Reference Dealers. If more than three quotations are provided, the Market Value will be the arithmetic mean of the prices, without regard to the quotations having the highest and lowest prices. If three quotations are provided, the Market Value will be the quotation remaining after disregarding the highest and lowest quotations. For this purpose, if more than one quotation has the same highest or lowest price, then one of such quotations shall be disregarded. If fewer than three quotations are provided, the Market Value of the relevant Securities, Equivalent Securities, Collateral or Equivalent Collateral shall be determined by the Party making the determination of Market Value acting reasonably;

(b) in relation to a Letter of Credit the face or stated amount of such Letter of Credit; and

(c) in relation to Cash Collateral the amount of the currency concerned;

**Nominee** means a nominee or agent appointed by either Party to accept delivery of, hold or deliver Securities, Equivalent Securities, Collateral and/or Equivalent Collateral or to receive or make payments on its behalf;

**Non-Cash Collateral** means Collateral other than Cash Collateral;

**Non-Defaulting Party** has the meaning given in paragraph 10;

**Notification Time** means the time specified in paragraph 1.5 of the Schedule;

**Parties** means Lender and Borrower and **Party** shall be construed accordingly;

**Posted Collateral** has the meaning given in paragraph 5.4;

**Reference Dealers** means, in relation to any Securities, Equivalent Securities, Collateral or Equivalent Collateral, four leading dealers in the relevant securities selected by the Party making the determination of Market Value in good faith;

**Required Collateral Value** has the meaning given in paragraph 5.4;

**Sales Tax** means value added tax and any other Tax of a similar nature (including, without limitation, any sales tax of any relevant jurisdiction);

**Settlement Date** means the date upon which Securities are due to be transferred to Borrower in accordance with this Agreement;

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**Stamp Tax** means any stamp, transfer, registration, documentation or similar Tax; and

**Tax** means any present or future tax, levy, impost, duty, charge, assessment or fee of any nature (including interest, penalties and additions thereto) imposed by any government or other taxing authority in respect of any transaction effected pursuant to or contemplated by, or any payment under or in respect of, this Agreement.

## 2.2 Headings

All headings appear for convenience only and shall not affect the interpretation of this Agreement.

## 2.3 Market terminology

Notwithstanding the use of expressions such as "borrow", "lend", "Collateral", "Margin" etc. which are used to reflect terminology used in the market for transactions of the kind provided for in this Agreement, title to Securities "borrowed" or "lent" and "Collateral" provided in accordance with this Agreement shall pass from one Party to another as provided for in this Agreement, the Party obtaining such title being obliged to deliver Equivalent Securities or Equivalent Collateral as the case may be.

## 2.4 Currency conversions

Subject to paragraph 11, for the purposes of determining any prices, sums or values (including Market Value and Required Collateral Value) prices, sums or values stated in currencies other than the Base Currency shall be converted into the Base Currency at the latest available spot rate of exchange quoted by a bank selected by Lender (or if an Event of Default has occurred in relation to Lender, by Borrower) in the London inter-bank market for the purchase of the Base Currency with the currency concerned on the day on which the calculation is to be made or, if that day is not a Business Day, the spot rate of exchange quoted at Close of Business on the immediately preceding Business Day on which such a quotation was available.

2.5 The Parties confirm that introduction of and/or substitution (in place of an existing currency) of a new currency as the lawful currency of a country shall not have the effect of altering, or discharging, or excusing performance under, any term of the Agreement or any Loan thereunder, nor give a Party the right unilaterally to alter or terminate the Agreement or any Loan thereunder. Securities will for the purposes of this Agreement be regarded as equivalent to other securities notwithstanding that as a result of such introduction and/or substitution those securities have been redenominated into the new currency or the nominal value of the securities has changed in connection with such redenomination.

## 2.6 Modifications etc. to legislation

Any reference in this Agreement to an act, regulation or other legislation shall include a reference to any statutory modification or re-enactment thereof for the time being in force.

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## 3. LOANS OF SECURITIES

Lender will lend Securities to Borrower, and Borrower will borrow Securities from Lender in accordance with the terms and conditions of this Agreement. The terms of each Loan shall be agreed prior to the commencement of the relevant Loan either orally or in writing (including any agreed form of electronic communication) and confirmed in such form and on such basis as shall be agreed between the Parties. Unless otherwise agreed, any confirmation produced by a Party shall not supersede or prevail over the prior oral, written or electronic communication (as the case may be).

#### **4. DELIVERY**

##### **4.1 Delivery of Securities on commencement of Loan**

Lender shall procure the Delivery of Securities to Borrower or deliver such Securities in accordance with this Agreement and the terms of the relevant Loan.

##### **4.2 Requirements to effect Delivery**

The Parties shall execute and deliver all necessary documents and give all necessary instructions to procure that all right, title and interest in:

- (a) any Securities borrowed pursuant to paragraph 3;
- (b) any Equivalent Securities delivered pursuant to paragraph 8;
- (c) any Collateral delivered pursuant to paragraph 5;
- (d) any Equivalent Collateral delivered pursuant to paragraphs 5 or 8;

shall pass from one Party to the other subject to the terms and conditions set out in this Agreement, on delivery of the same in accordance with this Agreement with full title guarantee, free from all liens, charges and encumbrances. In the case of Securities, Collateral, Equivalent Securities or Equivalent Collateral title to which is registered in a computer-based system which provides for the recording and transfer of title to the same by way of book entries, delivery and transfer of title shall take place in accordance with the rules and procedures of such system as in force from time to time. The Party acquiring such right, title and interest shall have no obligation to return or deliver any of the assets so acquired but, in so far as any Securities are borrowed by or any Collateral is delivered to such Party, such Party shall be obliged, subject to the terms of this Agreement, to deliver Equivalent Securities or Equivalent Collateral as appropriate.

##### **4.3 Deliveries to be simultaneous unless otherwise agreed**

Where under the terms of this Agreement a Party is not obliged to make a Delivery unless simultaneously a Delivery is made to it, subject to and without prejudice to its rights under paragraph 8.6, such Party may from time to time in accordance with market practice and in recognition of the practical difficulties in arranging simultaneous delivery of Securities, Collateral and cash transfers, waive its right under this Agreement in respect of simultaneous delivery and/or payment provided that no such waiver (whether by course of conduct or otherwise) in respect of one transaction shall bind it in respect of any other transaction.

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##### **4.4 Deliveries of Income**

In respect of Income being paid in relation to any Loaned Securities or Collateral, Borrower (in the case of Income being paid in respect of Loaned Securities) and Lender (in the case of Income being paid in respect of Collateral) shall provide to the other Party, as the case may be, any endorsements or assignments as shall be customary and appropriate to effect, in accordance with paragraph 6, the payment or delivery of money or property in respect of such Income to Lender, irrespective of whether Borrower received such endorsements or assignments in respect of any Loaned Securities, or to Borrower, irrespective of whether Lender received such endorsements or assignments in respect of any Collateral.

#### **5. COLLATERAL**

##### **5.1 Delivery of Collateral on commencement of Loan**

Subject to the other provisions of this paragraph 5, Borrower undertakes to deliver to or deposit with Lender (or in accordance with Lender's instructions) Collateral simultaneously with Delivery of the Securities to which the Loan relates and in any event no later than Close of Business on the Settlement Date.

## 5.2 Deliveries through securities settlement systems generating automatic payments

Unless otherwise agreed between the Parties, where any Securities, Equivalent Securities, Collateral or Equivalent Collateral (in the form of securities) are transferred through a book entry transfer or settlement system which automatically generates a payment or delivery, or obligation to pay or deliver, against the transfer of such securities, then:

(a) such automatically generated payment, delivery or obligation shall be treated as a payment or delivery by the transferee to the transferor, and except to the extent that it is applied to discharge an obligation of the transferee to effect payment or delivery, such payment or delivery, or obligation to pay or deliver, shall be deemed to be a transfer of Collateral or delivery of Equivalent Collateral, as the case may be, made by the transferee until such time as the Collateral or Equivalent Collateral is substituted with other Collateral or Equivalent Collateral if an obligation to deliver other Collateral or deliver Equivalent Collateral existed immediately prior to the transfer of Securities, Equivalent Securities, Collateral or Equivalent Collateral; and (b) the Party receiving such substituted Collateral or Equivalent Collateral, or if no obligation to deliver other Collateral or redeliver Equivalent Collateral existed immediately prior to the transfer of Securities, Equivalent Securities, Collateral or Equivalent Collateral, the Party receiving the deemed transfer of Collateral or Delivery of Equivalent Collateral, as the case may be, shall cause to be made to the other Party for value the same day either, where such transfer is a payment, an irrevocable payment in the amount of such transfer or, where such transfer is a Delivery, an irrevocable Delivery of securities (or other property, as the case may be) equivalent to such property.

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## 5.3 Substitutions of Collateral

Borrower may from time to time call for the repayment of Cash Collateral or the Delivery of Collateral equivalent to any Collateral delivered to Lender prior to the date on which the same would otherwise have been repayable or deliverable provided that at or prior to the time of such repayment or Delivery Borrower shall have delivered Alternative Collateral acceptable to Lender and Borrower is in compliance with paragraph 5.4 or paragraph 5.5, as applicable.

## 5.4 Marking to Market of Collateral during the currency of a Loan on aggregated basis

Unless paragraph 1.3 of the Schedule indicates that paragraph 5.5 shall apply in lieu of this paragraph 5.4, or unless otherwise agreed between the Parties:

(a) the aggregate Market Value of the Collateral delivered to or deposited with Lender (excluding any Equivalent Collateral repaid or delivered under paragraphs 5.4(b) or 5.5(b) (as the case may be)) (**Posted Collateral**) in respect of all Loans outstanding under this Agreement shall equal the aggregate of the Market Value of Securities equivalent to the Loaned Securities and the applicable Margin (the **Required Collateral Value**) in respect of such Loans;

(b) if at any time on any Business Day the aggregate Market Value of the Posted Collateral in respect of all Loans outstanding under this Agreement together with: (i) all amounts due and payable by the Lender under this Agreement but which are unpaid; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of any Non-Cash Collateral, the amount or Market Value of Income payable in respect of such Non-Cash Collateral exceeds the aggregate of the Required Collateral Values in respect of such Loans together with: (i) all amounts due and payable by the Borrower under this Agreement but which are unpaid; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of any securities equivalent to Loaned Securities, the amount or Market Value of Income payable in respect of such Equivalent Securities, Lender shall (on demand) repay and/or deliver, as the case may be, to Borrower such Equivalent Collateral as will eliminate the excess;

(c) if at any time on any Business Day the aggregate Market Value of the Posted Collateral in respect of all Loans outstanding under this Agreement together with: (i) all amounts due and payable by the Lender under this Agreement but which are unpaid; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of any Non-Cash Collateral, the amount or Market Value of Income payable in respect of such Non-Cash Collateral falls below the aggregate of Required Collateral Values in respect of all such Loans together with: (i) all amounts due and payable by the Borrower under this Agreement but which are unpaid; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of Securities equivalent to any Loaned Securities, the amount or Market Value of Income payable in respect of such Equivalent Securities, Borrower shall (on demand) provide such further Collateral to Lender as will eliminate the deficiency;

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(d) where a Party acts as both Lender and Borrower under this Agreement, the provisions of paragraphs 5.4(b) and 5.4(c) shall apply separately (and without duplication) in respect of Loans entered into by that Party as Lender and Loans entered into by that Party as Borrower.

#### 5.5 Marking to Market of Collateral during the currency of a Loan on a Loan by Loan basis

If paragraph 1.3 of the Schedule indicates this paragraph 5.5 shall apply in lieu of paragraph 5.4, the Posted Collateral in respect of any Loan shall bear from day to day and at any time the same proportion to the Market Value of Securities equivalent to the Loaned Securities as the Posted Collateral bore at the commencement of such Loan.

Accordingly:

(a) the Market Value of the Posted Collateral to be delivered or deposited while the Loan continues shall be equal to the Required Collateral Value;

(b) if at any time on any Business Day the Market Value of the Posted Collateral in respect of any Loan together with:

(i) all amounts due and payable by the Lender in respect of that Loan but which are unpaid; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of any Non-Cash Collateral, the amount or Market Value of Income payable in respect of such Non-Cash Collateral exceeds the Required Collateral Value in respect of such Loan together with: (i) all amounts due and payable by the Borrower in respect of that Loan; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of Securities equivalent to any Loaned Securities, the amount or Market Value of Income payable in respect of such Equivalent Securities, Lender shall (on demand) repay and/or deliver, as the case may be, to Borrower such Equivalent Collateral as will eliminate the excess; and

(c) if at any time on any Business Day the Market Value of the Posted Collateral together with: (i) all amounts due any payable by the Lender in respect of that Loan; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of any Non-Cash Collateral, the amount or Market Value of Income payable in respect of such Non-Cash Collateral falls below the Required Collateral Value together with: (i) all amounts due and payable by the Borrower in respect of that Loan; and (ii) if agreed between the parties and if the Income Record Date has occurred in respect of Securities equivalent to any Loaned Securities, the amount or Market Value of Income payable in respect of such Equivalent Securities, Borrower shall (on demand) provide such further Collateral to Lender as will eliminate the deficiency.

#### 5.6 Requirements to deliver excess Collateral

Where paragraph 5.4 applies, unless paragraph 1.4 of the Schedule indicates that this paragraph 5.6 does not apply, if a Party (the *first Party*) would, but for this paragraph 5.6, be required under paragraph 5.4 to provide further Collateral or deliver Equivalent Collateral in circumstances where the other Party (the *second Party*) would, but for this paragraph 5.6, also be required to or provide Collateral or deliver Equivalent Collateral under paragraph 5.4, then the Market Value of the Collateral or Equivalent Collateral deliverable by the first Party (X) shall be set off against the Market Value of the Collateral or Equivalent Collateral deliverable by the second Party (Y) and the only obligation of the Parties under paragraph 5.4 shall be, where X exceeds Y, an obligation of the first Party, or where Y exceeds X, an obligation of the second Party to repay and/or (as the case may be) deliver Equivalent Collateral or to deliver further Collateral having a Market Value equal to the difference between X and Y.

5.7 Where Equivalent Collateral is repaid or delivered (as the case may be) or further Collateral is provided by a Party under paragraph 5.6, the Parties shall agree to which Loan or Loans such repayment, delivery or further provision is to be attributed and failing agreement it shall be attributed, as determined by the Party making such repayment, delivery or further provision to the earliest outstanding Loan and, in the case of a repayment or delivery up to the point at which the Market Value of Collateral in respect of such Loan equals the Required Collateral Value in respect of such Loan, and then to the next earliest outstanding Loan up to the similar point and so on.

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#### 5.8 Timing of repayments of excess Collateral or deliveries of further Collateral

Where any Equivalent Collateral falls to be repaid or delivered (as the case may be) or further Collateral is to be provided under this paragraph 5, unless otherwise provided or agreed between the Parties, if the relevant demand is received by the Notification Time specified in paragraph 1.5 of the Schedule, then the delivery shall be made not later than the Close of Business on the same Business Day; if a demand is received after the Notification Time, then the relevant delivery shall be made not later than the Close of Business on the next Business Day after the date such demand is received.

#### 5.9 Substitutions and extensions of Letters of Credit

Where Collateral is a Letter of Credit, Lender may by notice to Borrower require that Borrower, on the third Business Day following the date of delivery of such notice (or by such other time as the Parties may agree), substitute Collateral consisting of cash or other Collateral acceptable to Lender for the Letter of Credit. Prior to the expiration of any Letter of Credit supporting Borrower's obligations hereunder, Borrower shall, no later than 10.30 a.m. UK time on the second Business Day prior to the date such Letter of Credit expires (or by such other time as the Parties may agree), obtain an extension of the expiration of such Letter of Credit or replace such Letter of Credit by providing Lender with a substitute Letter of Credit in an amount at least equal to the amount of the Letter of Credit for which it is substituted.

## 6. DISTRIBUTIONS AND CORPORATE ACTIONS

6.1 In this paragraph 6, references to an amount of Income received by any Party in respect of any Loaned Securities or Non-Cash Collateral shall be to an amount received from the issuer after any applicable withholding or deduction for or on account of Tax.

### 6.2 Manufactured payments in respect of Loaned Securities

Where the term of a Loan extends over an Income Record Date in respect of any Loaned Securities, Borrower shall, on the date such Income is paid by the issuer, or on such other date as the Parties may from time to time agree, pay or deliver to Lender such sum of money or property as is agreed between the Parties or, failing such agreement, a sum of money or property equivalent to (and in the same currency as) the type and amount of such Income that would be received by Lender in respect of such Loaned Securities assuming such Securities were not loaned to Borrower and were retained by Lender on the Income Record Date.

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### 6.3 Manufactured payments in respect of Non-Cash Collateral

Where Non-Cash Collateral is delivered by Borrower to Lender and an Income Record Date in respect of such Non-Cash Collateral occurs before Equivalent Collateral is delivered by Lender to Borrower, Lender shall on the date such Income is paid, or on such other date as the Parties may from time to time agree, pay or deliver to Borrower a sum of money or property as is agreed between the Parties or, failing such agreement, a sum of money or property equivalent to (and in the same currency as) the type and amount of such Income that would be received by Lender in respect of such Non-Cash Collateral assuming Lender:

- (a) retained the Non-Cash Collateral on the Income Record Date; and
- (b) is not entitled to any credit, benefit or other relief in respect of Tax under any Applicable Law.

### 6.4 Indemnity for failure to redeliver Equivalent Non-Cash Collateral

Unless paragraph 1.6 of the Schedule indicates that this paragraph does not apply, where:

- (a) prior to any Income Record Date in relation to Non-Cash Collateral, Borrower has in accordance with paragraph 5.3 called for the Delivery of Equivalent Non-Cash Collateral; ~~Cash Collateral~~; Cash Collateral;
- (b) Borrower has given notice of such call to Lender so as to be effective, at the latest, five hours before the Close of Business on the last Business Day on which Lender would customarily be required to initiate settlement of the Non-Cash Collateral to enable settlement to take place on the Business Day immediately preceding the relevant Income Record Date;
- (c) Borrower has provided reasonable details to Lender of the Non-Cash Collateral, the relevant Income Record Date and the proposed Alternative Collateral;
- (d) Lender, acting reasonably, has determined that such Alternative Collateral is acceptable to it and Borrower shall have delivered or delivers such Alternative Collateral to Lender; and
- (e) Lender has failed to make reasonable efforts to transfer Equivalent Non-Cash Collateral to Borrower prior to such Income Record Date,

Lender shall indemnify Borrower in respect of any cost, loss or damage (excluding any indirect or consequential loss or damage or any amount otherwise compensated by Lender, including pursuant to paragraphs 6.3 and/or 9.3) suffered by Borrower that it would not have suffered had the relevant Equivalent Non-Cash Collateral been transferred to Borrower prior to such Income Record Date.

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## 6.5 Income in the form of Securities

Where Income, in the form of securities, is paid in relation to any Loaned Securities or Collateral, such securities shall be added to such Loaned Securities or Collateral (and shall constitute Loaned Securities or Collateral, as the case may be, and be part of the relevant Loan) and will not be delivered to Lender, in the case of Loaned Securities, or to Borrower, in the case of Collateral, until the end of the relevant Loan, provided that the Lender or Borrower (as the case may be) fulfils its obligations under paragraph 5.4 or 5.5 (as applicable) with respect to the additional Loaned Securities or Collateral, as the case may be.

## 6.6 Exercise of voting rights

Where any voting rights fall to be exercised in relation to any Loaned Securities or Collateral, neither Borrower, in the case of Equivalent Securities, nor Lender, in the case of Equivalent Collateral, shall have any obligation to arrange for voting rights of that kind to be exercised in accordance with the instructions of the other Party in relation to the Securities borrowed by it or transferred to it by way of Collateral, as the case may be, unless otherwise agreed between the Parties.

## 6.7 Corporate actions

Where, in respect of any Loaned Securities or any Collateral, any rights relating to conversion, sub-division, consolidation, pre-emption, rights arising under a takeover offer, rights to receive securities or a certificate which may at a future date be exchanged for securities or other rights, including those requiring election by the holder for the time being of such Securities or Collateral, become exercisable prior to the delivery of Equivalent Securities or Equivalent Collateral, then Lender or Borrower, as the case may be, may, within a reasonable time before the latest time for the exercise of the right or option give written notice to the other Party that on delivery of Equivalent Securities or Equivalent Collateral, as the case may be, it wishes to receive Equivalent Securities or Equivalent Collateral in such form as will arise if the right is exercised or, in the case of a right which may be exercised in more than one manner, is exercised as is specified in such written notice.

## 7. RATES APPLICABLE TO LOANED SECURITIES AND CASH COLLATERAL

### 7.1 Rates in respect of Loaned Securities

In respect of each Loan, Borrower shall pay to Lender, in the manner prescribed in sub-paragraph 7.3, sums calculated by applying such rate as shall be agreed between the Parties from time to time to the daily Market Value of the Loaned Securities.

### 7.2 Rates in respect of Cash Collateral

Where Cash Collateral is deposited with Lender in respect of any Loan, Lender shall pay to Borrower, in the manner prescribed in paragraph 7.3, sums calculated by applying such rates as shall be agreed between the Parties from time to time to the amount of such Cash Collateral. Any such payment due to Borrower may be set-off against any payment due to Lender pursuant to paragraph 7.1.

### 7.3 Payment of rates

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In respect of each Loan, the payments referred to in paragraph 7.1 and 7.2 shall accrue daily in respect of the period commencing on and inclusive of the Settlement Date and terminating on and exclusive of the Business Day upon which Equivalent Securities are delivered or Cash Collateral is repaid. Unless otherwise agreed, the sums so accruing in respect of each calendar month shall be paid in arrears by the relevant Party not later than the Business Day which is the tenth Business Day after the last Business Day of the calendar month to which such payments relate or such other date as the Parties shall from time to time agree.

## 8. DELIVERY OF EQUIVALENT SECURITIES

### 8.1 Lender's right to terminate a Loan

Subject to paragraph 11 and the terms of the relevant Loan, Lender shall be entitled to terminate a Loan and to call for the delivery of all or any Equivalent Securities at any time by giving notice on any Business Day of not less than the standard settlement time for such Equivalent Securities on the exchange or in the clearing organisation through which the Loaned Securities were originally delivered. Borrower shall deliver such Equivalent Securities not later than the expiry of such notice in accordance with Lender's instructions.

### 8.2 Borrower's right to terminate a Loan

Subject to the terms of the relevant Loan, Borrower shall be entitled at any time to terminate a Loan and to deliver all and any Equivalent Securities due and outstanding to Lender in accordance with Lender's instructions and Lender shall accept such delivery.

### 8.3 Delivery of Equivalent Securities on termination of a Loan

Borrower shall procure the Delivery of Equivalent Securities to Lender or deliver Equivalent Securities in accordance with this Agreement and the terms of the relevant Loan on termination of the Loan. For the avoidance of doubt any reference in this Agreement or in any other agreement or communication between the Parties (howsoever expressed) to an obligation to deliver or account for or act in relation to Loaned Securities shall accordingly be construed as a reference to an obligation to deliver or account for or act in relation to Equivalent Securities.

### 8.4 Delivery of Equivalent Collateral on termination of a Loan

On the date and time that Equivalent Securities are required to be delivered by Borrower on the termination of a Loan, Lender shall simultaneously (subject to paragraph 5.4 if applicable) repay to Borrower any Cash Collateral or, as the case may be, deliver Collateral equivalent to the Collateral provided by Borrower pursuant to paragraph 5 in respect of such Loan. For the avoidance of doubt any reference in this Agreement or in any other agreement or communication between the Parties (however expressed) to an obligation to deliver or account for or act in relation to Collateral shall accordingly be construed as a reference to an obligation to deliver or account for or act in relation to Equivalent Collateral.

### 8.5 Delivery of Letters of Credit

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Where a Letter of Credit is provided by way of Collateral, the obligation to deliver Equivalent Collateral is satisfied by Lender delivering for cancellation the Letter of Credit so provided, or where the Letter of Credit is provided in respect of more than one Loan, by Lender consenting to a reduction in the value of the Letter of Credit.

### 8.6 Delivery obligations to be reciprocal

Neither Party shall be obliged to make delivery (or make a payment as the case may be) to the other unless it is satisfied that the other Party will make such delivery (or make an appropriate payment as the case may be) to it. If it is not so satisfied (whether because an Event of Default has occurred in respect of the other Party or otherwise) it shall notify the other Party and unless that other Party has made arrangements which are sufficient to assure full delivery (or the appropriate payment as the case may be) to the notifying Party, the notifying Party shall (provided it is itself in a position, and willing, to perform its own obligations) be entitled to withhold delivery (or payment, as the case may be) to the other Party until such arrangements to assure full delivery (or the appropriate payment as the case may be) are made.

## 9. FAILURE TO DELIVER

### 9.1 Borrower's failure to deliver Equivalent Securities

If Borrower fails to deliver Equivalent Securities in accordance with paragraph 8.3 Lender may:

- (a) elect to continue the Loan (which, for the avoidance of doubt, shall continue to be taken into account for the purposes of paragraph 5.4 or 5.5 as applicable); or
- (b) at any time while such failure continues, by written notice to Borrower declare that that Loan (but only that Loan) shall be terminated immediately in accordance with paragraph 11.2 as if (i) an Event of Default had occurred in relation to the Borrower, (ii) references to the Termination Date were to the date on which notice was given under this sub-paragraph, and
- (iii) the Loan were the only Loan outstanding. For the avoidance of doubt, any such failure shall not constitute an Event of Default (including under paragraph 10.1(ii)) unless the Parties otherwise agree.

### 9.2 Lender's failure to deliver Equivalent Collateral

If Lender fails to deliver Equivalent Collateral comprising Non-Cash Collateral in accordance with paragraph 8.4 or 8.5, Borrower may:

- (a) elect to continue the Loan (which, for the avoidance of doubt, shall continue to be taken into account for the purposes of paragraph 5.4 or 5.5 as applicable); or
- (b) at any time while such failure continues, by written notice to Lender declare that that Loan (but only that Loan) shall be terminated immediately in accordance with paragraph 11.2 as if (i) an Event of Default had occurred in relation to the Lender, (ii) references to the Termination Date were to the date on which notice was given under this sub-paragraph, and (iii) the Loan were the only Loan

outstanding. For the avoidance of doubt, any such failure shall not constitute an Event of Default (including under paragraph 10.1(i)) unless the Parties otherwise agree.

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### 9.3 Failure by either Party to deliver

Where a Party (the **Transferor**) fails to deliver Equivalent Securities or Equivalent Collateral by the time required under this Agreement or within such other period as may be agreed between the Transferor and the other Party (the **Transferee**) and the Transferee:

(a) incurs interest, overdraft or similar costs and expenses; or

(b) incurs costs and expenses as a direct result of a Buy-in exercised against it by a third party, then the Transferor agrees to pay within one Business Day of a demand from the Transferee and hold harmless the Transferee with respect to all reasonable costs and expenses listed in sub-paragraphs (a) and (b) above properly incurred which arise directly from such failure other than (i) such costs and expenses which arise from the negligence or wilful default of the Transferee and (ii) any indirect or consequential losses.

## 10. EVENTS OF DEFAULT

10.1 Each of the following events occurring and continuing in relation to either Party (the **Defaulting Party**, the other Party being the **Non-Defaulting Party**) shall be an Event of Default but only (subject to sub-paragraph 10.1(d)) where the Non-Defaulting Party serves written notice on the Defaulting Party:

(a) Borrower or Lender failing to pay or repay Cash Collateral or to deliver Collateral on commencement of the Loan under paragraph 5.1 or to deliver further Collateral under paragraph 5.4 or 5.5;

(b) Lender or Borrower failing to comply with its obligations under paragraph 6.2 or 6.3 upon the due date and not remedying such failure within three Business Days after the Non-Defaulting Party serves written notice requiring it to remedy such failure;

(c) Lender or Borrower failing to pay any sum due under paragraph 9.1(b), 9.2(b) or 9.3 upon the due date;

(d) an Act of Insolvency occurring with respect to Lender or Borrower, provided that, where the Parties have specified in paragraph 5 of the Schedule that Automatic Early Termination shall apply, an Act of Insolvency which is the presentation of a petition for winding up or any analogous proceeding or the appointment of a liquidator or analogous officer of the Defaulting Party shall not require the Non-Defaulting Party to serve written notice on the Defaulting Party (**Automatic Early Termination**);

(e) any warranty made by Lender or Borrower in paragraph 13 or paragraphs 14(a) to 14(d) being incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated;

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(f) Lender or Borrower admitting to the other that it is unable to, or it intends not to, perform any of its obligations under this Agreement and/or in respect of any Loan where such failure to perform would with the service of notice or lapse of time constitute an Event of Default;

(g) all or any material part of the assets of Lender or Borrower being transferred or ordered to be transferred to a trustee (or a person exercising similar functions) by a regulatory authority pursuant to any legislation;

(h) Lender (if applicable) or Borrower being declared in default or being suspended or expelled from membership of or participation in, any securities exchange or suspended or prohibited from dealing in securities by any regulatory authority, in each case on the grounds that it has failed to meet any requirements relating to financial resources or credit rating; or (i) Lender or Borrower failing to perform any other of its obligations under this Agreement and not remedying such failure within 30 days after the Non-Defaulting Party serves written notice requiring it to remedy such failure.

10.2 Each Party shall notify the other (in writing) if an Event of Default or an event which, with the passage of time and/or upon the serving of a written notice as referred to above, would be an Event of Default, occurs in relation to it.

10.3 The provisions of this Agreement constitute a complete statement of the remedies available to each Party in respect of any Event of Default.

10.4 Subject to paragraphs 9 and 11, neither Party may claim any sum by way of consequential loss or damage in the event of failure by the other Party to perform any of its obligations under this Agreement.

## 11. CONSEQUENCES OF AN EVENT OF DEFAULT

11.1 If an Event of Default occurs in relation to either Party then paragraphs 11.2 to 11.7 below shall apply.

11.2 The Parties' delivery and payment obligations (and any other obligations they have under this Agreement) shall be accelerated so as to require performance thereof at the time such Event of Default occurs (the date of which shall be the **Termination Date**) so that performance of such delivery and payment obligations shall be effected only in accordance with the following provisions.

(a) The Default Market Value of the Equivalent Securities and Equivalent Non-Cash Collateral to be delivered and the amount of any Cash Collateral (including sums accrued) to be repaid and any other cash (including interest accrued) to be paid by each Party shall be established by the Non-Defaulting Party in accordance with paragraph 11.4 and deemed as at the Termination Date.

(b) On the basis of the sums so established, an account shall be taken (as at the Termination Date) of what is due from each Party to the other under this Agreement (on the basis that each Party's claim against the other in respect of delivery of Equivalent Securities or Equivalent Non-Cash Collateral equal to the Default Market Value thereof) and the sums due from one Party shall be set off against the sums due from the other and only the balance of the account shall be payable (by the Party having the claim valued at the lower amount pursuant to the foregoing) and such balance shall be payable on the next following Business Day after such account has been taken and such sums have been set off in accordance with this paragraph. For the purposes of this calculation, any sum not denominated in the Base Currency shall be converted into the Base Currency at the ~~spot rate~~ Spot Rate prevailing at such dates and times determined by the Non-Defaulting Party acting reasonably.

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(c) If the balance under sub-paragraph (b) above is payable by the Non-Defaulting Party and the Non-Defaulting Party had delivered to the Defaulting Party a Letter of Credit, the Defaulting Party shall draw on the Letter of Credit to the extent of the balance due and shall subsequently deliver for cancellation the Letter of Credit so provided.

(d) If the balance under sub-paragraph (b) above is payable by the Defaulting Party and the Defaulting Party had delivered to the Non-Defaulting Party a Letter of Credit, the Non-Defaulting Party shall draw on the Letter of Credit to the extent of the balance due and shall subsequently deliver for cancellation the Letter of Credit so provided.

(e) In all other circumstances, where a Letter of Credit has been provided to a Party, such Party shall deliver for cancellation the Letter of Credit so provided.

11.3 For the purposes of this Agreement, the **Default Market Value** of any Equivalent Collateral in the form of a Letter of Credit shall be zero and of any Equivalent Securities or any other Equivalent Non-Cash Collateral shall be determined in accordance with paragraphs 11.4 to 11.6 below, and for this purpose:

(a) the **Appropriate Market** means, in relation to securities of any description, the market which is the most appropriate market for securities of that description, as determined by the Non-Defaulting Party;

(b) the **Default Valuation Time** means, in relation to an Event of Default, the close of business in the Appropriate Market on the fifth dealing day after the day on which that Event of Default occurs or, where that Event of Default is the occurrence of an Act of Insolvency in respect of which under paragraph 10.1(d) no notice is required from the Non-Defaulting Party in order for such event to constitute an Event of Default, the close of business on the fifth dealing day after the day on which the Non-Defaulting Party first became aware of the occurrence of such Event of Default;

(c) **Deliverable Securities** means Equivalent Securities or Equivalent Non-Cash Collateral to be delivered by the Defaulting Party;

(d) **Net Value** means at any time, in relation to any Deliverable Securities or Receivable Securities, the amount which, in the reasonable opinion of the Non-Defaulting Party, represents their fair market value, having regard to such pricing sources and methods (which may include, without limitation, available prices for securities with similar maturities, terms and credit



characteristics as the relevant Equivalent Securities or Equivalent Collateral) ~~as the Non-Defaulting Party~~ as the Non-Defaulting Party considers appropriate, less, in the case of Receivable Securities, or plus, in the case of Deliverable Securities, all Transaction Costs incurred or reasonably anticipated in connection with the purchase or sale of such securities;

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(e) **Receivable Securities** means Equivalent Securities or Equivalent Non-Cash Collateral to be delivered to the Defaulting Party; and

(f) **Transaction Costs** in relation to any transaction contemplated in paragraph 11.4 or 11.5 means the reasonable costs, commissions (including internal commissions), fees and expenses (including any mark-up or mark-down or premium paid for guaranteed delivery) incurred or reasonably anticipated in connection with the purchase of Deliverable Securities or sale of Receivable Securities, calculated on the assumption that the aggregate thereof is the least that could reasonably be expected to be paid in order to carry out the transaction.

#### 11.4 If between the Termination Date and the Default Valuation Time:

(a) the Non-Defaulting Party has sold, in the case of Receivable Securities, or purchased, in the case of Deliverable Securities, securities which form part of the same issue and are of an identical type and description as those Equivalent Securities or that Equivalent Collateral, (and regardless as to whether or not such sales or purchases have settled) the Non-Defaulting Party may elect to treat as the Default Market Value:

(i) in the case of Receivable Securities, the net proceeds of such sale after deducting all Transaction Costs; provided that, where the securities sold are not identical in amount to the Equivalent Securities or Equivalent Collateral, the Non-Defaulting Party may, acting in good faith, either (A) elect to treat such net proceeds of sale divided by the amount of securities sold and multiplied by the amount of the Equivalent Securities or Equivalent Collateral as the Default Market Value or (B) elect to treat such net proceeds of sale of the Equivalent Securities or Equivalent Collateral actually sold as the Default Market Value of that proportion of the Equivalent Securities or Equivalent Collateral, and, in the case of (B), the Default Market Value of the balance of the Equivalent Securities or Equivalent Collateral shall be determined separately in accordance with the provisions of this paragraph 11.4; or

(ii) in the case of Deliverable Securities, the aggregate cost of such purchase, including all Transaction Costs; provided that, where the securities purchased are not identical in amount to the Equivalent Securities or Equivalent Collateral, the Non-Defaulting Party may, acting in good faith, either (A) elect to treat such aggregate cost divided by the amount of securities purchased and multiplied by the amount of the Equivalent Securities or Equivalent Collateral as the Default Market Value or (B) elect to treat the aggregate cost of purchasing the Equivalent Securities or Equivalent Collateral actually purchased as the Default Market Value of that proportion of the Equivalent Securities or Equivalent Collateral, and, in the case of (B), the Default Market Value of the balance of the Equivalent Securities or Equivalent Collateral shall be determined separately in accordance with the provisions of this paragraph 11.4;

(b) the Non-Defaulting Party has received, in the case of Deliverable Securities, offer quotations or, in the case of Receivable Securities, bid quotations in respect of securities of the relevant description from two or more market makers or regular dealers in the Appropriate Market in a commercially reasonable size (as determined by the Non-Defaulting Party) the Non-Defaulting Party may elect to treat as the Default Market Value of the relevant Equivalent Securities or Equivalent Collateral:

(i) the price quoted (or where more than one price is so quoted, the arithmetic mean of the prices so quoted) by each of them for, in the case of Deliverable Securities, the sale by the relevant market maker or dealer of such securities or, in the case of Receivable Securities, the purchase by the relevant market maker or dealer of such securities, provided that such price or prices quoted may be adjusted in a commercially reasonable manner by the Non-Defaulting Party to reflect accrued but unpaid coupons not reflected in the price or prices quoted in respect of such Securities;

(ii) after deducting, in the case of Receivable Securities or adding in the case of Deliverable Securities the Transaction Costs which would be incurred or reasonably anticipated in connection with such transaction.

11.5 If, acting in good faith, either (A) the Non-Defaulting Party has endeavoured but been unable to sell or purchase securities in accordance with paragraph 11.4(a) above or to obtain quotations in accordance with paragraph 11.4(b) above (or both) or (B) the Non-Defaulting Party has determined that it would not be commercially reasonable to sell or purchase securities at the prices bid or offered or to obtain such quotations, or that it would not be commercially reasonable to use any quotations which it has obtained under paragraph 11.4(b) above the Non-Defaulting Party may determine the Net Value of the relevant Equivalent



Securities or Equivalent Collateral (which shall be specified) and the Non-Defaulting Party may elect to treat such Net Value as the Default Market Value of the relevant Equivalent Securities or Equivalent Collateral.

11.6 To the extent that the Non-Defaulting Party has not determined the Default Market Value in accordance with paragraph 11.4, the Default Market Value of the relevant Equivalent Securities or Equivalent Collateral shall be an amount equal to their Net Value at the Default Valuation Time; provided that, if at the Default Valuation Time the Non-Defaulting Party reasonably determines that, owing to circumstances affecting the market in the Equivalent Securities or Equivalent Collateral in question, it is not reasonably practicable for the Non-Defaulting Party to determine a Net Value of such Equivalent Securities or Equivalent Collateral which is commercially reasonable (by reason of lack of tradable prices or otherwise), the Default Market Value of such Equivalent Securities or Equivalent Collateral shall be an amount equal to their Net Value as determined by the Non-Defaulting Party as soon as reasonably practicable after the Default Valuation Time.

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#### **Other costs, expenses and interest payable in consequence of an Event of Default**

11.7 The Defaulting Party shall be liable to the Non-Defaulting Party for the amount of all reasonable legal and other professional expenses incurred by the Non-Defaulting Party in connection with or as a consequence of an Event of Default, together with interest thereon at such rate as is agreed by the Parties and specified in paragraph 10 of the Schedule or, failing such agreement, the overnight London Inter Bank Offered Rate as quoted on a reputable financial information service (**LIBOR**) as at 11.00 a.m., London time, on the date on which it is to be determined or, in the case of an expense attributable to a particular transaction and, where the Parties have previously agreed a rate of interest for the transaction, that rate of interest if it is greater than LIBOR. Interest will accrue daily on a compound basis.

#### **Set-off**

11.8 Any amount payable to one Party (the **Payee**) by the other Party (the **Payer**) under paragraph 11.2(b) may, at the option of the Non-Defaulting Party, be reduced by its set-off against any amount payable (whether at such time or in the future or upon the occurrence of a contingency) by the Payee to the Payer (irrespective of the currency, place of payment or booking office of the obligation) under any other agreement between the Payee and the Payer or instrument or undertaking issued or executed by one Party to, or in favour of, the other Party. If an obligation is unascertained, the Non-Defaulting Party may in good faith estimate that obligation and set off in respect of the estimate, subject to accounting to the other Party when the obligation is ascertained. Nothing in this paragraph shall be effective to create a charge or other security interest. This paragraph shall be without prejudice and in addition to any right of set-off, combination of accounts, lien or other right to which any Party is at any time otherwise entitled (whether by operation of law, contract or otherwise).

### **12. TAXES**

#### **Withholding, gross-up and provision of information**

12.1 All payments under this Agreement shall be made without any deduction or withholding for or on account of any Tax unless such deduction or withholding is required by any Applicable Law.

12.2 Except as otherwise agreed, if the paying Party is so required to deduct or withhold, then that Party (**Payer**) shall:

- (a) promptly notify the other Party (**Recipient**) of such requirement;
- (b) pay or otherwise account for the full amount required to be deducted or withheld to the relevant authority;
- (c) upon written demand of Recipient, forward to Recipient documentation reasonably acceptable to Recipient, evidencing such payment to such authorities; and
- (d) other than in respect of any payment made by Lender to Borrower under paragraph 6.3, pay to Recipient, in addition to the payment to which Recipient is otherwise entitled under this Agreement, such additional amount as is necessary to ensure that the amount actually received by Recipient (after taking account of such withholding or deduction) will equal the amount Recipient would have received had no such deduction or withholding been required; provided Payer will not be required to pay any additional amount to Recipient under this sub-paragraph (d) to the extent it would not be required to be paid but for the failure by Recipient to comply with or perform any obligation under paragraph 12.3.

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12.3 Each Party agrees that it will upon written demand of the other Party deliver to such other Party (or to any government or other taxing authority as such other Party directs), any form or document and provide such other cooperation or assistance as may (in either case) reasonably be required in order to allow such other Party to make a payment under this Agreement without any deduction or withholding for or on account of any Tax or with such deduction or withholding at a reduced rate (so long as the completion, execution or submission of such form or document, or the provision of such cooperation or assistance, would not materially prejudice the legal or commercial position of the Party in receipt of such demand). Any such form or document shall be accurate and completed in a manner reasonably satisfactory to such other Party and shall be executed and delivered with any reasonably required certification by such date as is agreed between the Parties or, failing such agreement, as soon as reasonably practicable.

#### **Stamp Tax**

12.4 Unless otherwise agreed, Borrower hereby undertakes promptly to pay and account for any Stamp Tax chargeable in connection with any transaction effected pursuant to or contemplated by this Agreement (other than any Stamp Tax that would not be chargeable but for Lender's failure to comply with its obligations under this Agreement).

12.5 Borrower shall indemnify and keep indemnified Lender against any liability arising as a result of Borrower's failure to comply with its obligations under paragraph 12.4.

#### **Sales Tax**

12.6 All sums payable by one Party to another under this Agreement are exclusive of any Sales Tax chargeable on any supply to which such sums relate and an amount equal to such Sales Tax shall in each case be paid by the Party making such payment on receipt of an appropriate Sales Tax invoice.

#### **Retrospective changes in law**

12.7 Unless otherwise agreed, amounts payable by one Party to another under this Agreement shall be determined by reference to Applicable Law as at the date of the relevant payment and no adjustment shall be made to amounts paid under this Agreement as a result of:

- (a) any retrospective change in Applicable Law which is announced or enacted after the date of the relevant payment; or
- (b) any decision of a court of competent jurisdiction which is made after the date of the relevant payment (other than where such decision results from an action taken with respect to this Agreement or amounts paid or payable under this Agreement).

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### **13. LENDER'S WARRANTIES**

Each Party hereby warrants and undertakes to the other on a continuing basis to the intent that such warranties shall survive the completion of any transaction contemplated herein that, where acting as a Lender:

- (a) it is duly authorised and empowered to perform its duties and obligations under this Agreement;
- (b) it is not restricted under the terms of its constitution or in any other manner from lending Securities in accordance with this Agreement or from otherwise performing its obligations hereunder;
- (c) it is absolutely entitled to pass full legal and beneficial ownership of all Securities provided by it hereunder to Borrower free from all liens, charges and encumbrances; and
- (d) it is acting as principal in respect of this Agreement, other than in respect of an Agency Loan.

### **14. BORROWER'S WARRANTIES**

Each Party hereby warrants and undertakes to the other on a continuing basis to the intent that such warranties shall survive the completion of any transaction contemplated herein that, where acting as a Borrower:

- (a) it has all necessary licences and approvals, and is duly authorised and empowered, to perform its duties and obligations under this Agreement and will do nothing prejudicial to the continuation of such authorisation, licences or approvals;
- (b) it is not restricted under the terms of its constitution or in any other manner from borrowing Securities in accordance with this Agreement or from otherwise performing its obligations hereunder;
- (c) it is absolutely entitled to pass full legal and beneficial ownership of all Collateral provided by it hereunder to Lender free from all liens, charges and encumbrances;
- (d) it is acting as principal in respect of this Agreement; and
- (e) it is not entering into a Loan for the primary purpose of obtaining or exercising voting rights in respect of the Loaned Securities.

## 15. INTEREST ON OUTSTANDING PAYMENTS

In the event of either Party failing to remit sums in accordance with this Agreement such Party hereby undertakes to pay to the other Party upon demand interest (before as well as after judgment) on the net balance due and outstanding, for the period commencing on and inclusive of the original due date for payment to (but excluding) the date of actual payment, in the same currency as the principal sum and at the rate referred to in paragraph 11.7. Interest will accrue daily on a compound basis and will be calculated according to the actual number of days elapsed. No interest shall be payable under this paragraph in respect of any day on which one Party endeavours to make a payment to the other Party but the other Party is unable to receive it.

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## 16. TERMINATION OF THIS AGREEMENT

Each Party shall have the right to terminate this Agreement by giving not less than 15 Business Days' notice in writing to the other Party (which notice shall specify the date of termination) subject to an obligation to ensure that all Loans which have been entered into but not discharged at the time such notice is given are duly discharged in accordance with this Agreement.

## 17. SINGLE AGREEMENT

Each Party acknowledges that, and has entered into this Agreement and will enter into each Loan in consideration of and in reliance upon the fact that, all Loans constitute a single business and contractual relationship and are made in consideration of each other. Accordingly, each Party agrees:

- (a) to perform all of its obligations in respect of each Loan, and that a default in the performance of any such obligations shall constitute a default by it in respect of all Loans, subject always to the other provisions of the Agreement; and
- (b) that payments, deliveries and other transfers made by either of them in respect of any Loan shall be deemed to have been made in consideration of payments, deliveries and other transfers in respect of any other Loan.

## 18. SEVERANCE

If any provision of this Agreement is declared by any judicial or other competent authority to be void or otherwise unenforceable, that provision shall be severed from the Agreement and the remaining provisions of this Agreement shall remain in full force and effect. The Agreement shall, however, thereafter be amended by the Parties in such reasonable manner so as to achieve as far as possible, without illegality, the intention of the Parties with respect to that severed provision.

## 19. SPECIFIC PERFORMANCE

Each Party agrees that in relation to legal proceedings it will not seek specific performance of the other Party's obligation to deliver Securities, Equivalent Securities, Collateral or Equivalent Collateral but without prejudice to any other rights it may have.

## 20. NOTICES

20.1 Any notice or other communication in respect of this Agreement may be given in any manner set forth below to the address or number or in accordance with the electronic messaging system details set out in paragraph 65 of the Schedule and will be deemed effective as indicated:

- (a) if in writing and delivered in person or by courier, on the date it is delivered;

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(b) if sent by facsimile transmission, on the date that transmission is received by a responsible employee of the recipient in legible form (it being agreed that the burden of proving receipt will be on the sender and will not be met by a transmission report generated by the ~~sender's~~ sender's facsimile machine);

(c) if sent by certified or registered mail (airmail, if overseas) or the equivalent (return receipt requested), on the date that mail is delivered or its delivery is attempted; or

(d) if sent by electronic messaging system, on the date that electronic message is received, unless the date of that delivery (or attempted delivery) or the receipt, as applicable, is not a Business Day or that communication is delivered (or attempted) or received, as applicable, after the Close of Business on a Business Day, in which case that communication shall be deemed given and effective on the first following day that is a Business Day.

20.2 Either Party may by notice to the other change the address or facsimile number or electronic messaging system details at which notices or other communications are to be given to it.

## 21. ASSIGNMENT

21.1 Subject to paragraph 21.2, neither Party may charge, assign or otherwise deal with all or any of its rights or obligations hereunder without the prior consent of the other Party.

21.2 Paragraph 21.1 shall not preclude a party from charging, assigning or otherwise dealing with all or any part of its interest in any sum payable to it under paragraph 11.2(b) or 11.7.

## 22. NON-WAIVER

No failure or delay by either Party (whether by course of conduct or otherwise) to exercise any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise thereof or the exercise of any other right, power or privilege as herein provided.

## 23. GOVERNING LAW AND JURISDICTION

23.1 This Agreement and any non-contractual obligations arising out of or in connection with this Agreement shall be governed by, and shall be construed in accordance with, English law.

23.2 The courts of England have exclusive jurisdiction to hear and decide any suit, action or proceedings, and to settle any disputes or any non-contractual obligation which may arise out of or in connection with this Agreement (respectively, *Proceedings* and *Disputes*) and, for these purposes, each Party irrevocably submits to the jurisdiction of the courts of England.

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23.3 Each Party irrevocably waives any objection which it might at any time have to the courts of England being nominated as the forum to hear and decide any Proceedings and to settle any Disputes and agrees not to claim that the courts of England are not a convenient or appropriate forum.

23.4 Each Party hereby respectively appoints the person identified in paragraph 7 of the Schedule pertaining to the relevant Party as its agent to receive on its behalf service of process in the courts of England. If such an agent ceases to be an agent of a Party, the relevant Party shall promptly appoint, and notify the other Party of the identity of its new agent in England.

## 24. TIME

Time shall be of the essence of the Agreement.

## 25. RECORDING

The Parties agree that each may record all telephone conversations between them.

## 26. WAIVER OF IMMUNITY

Each Party hereby waives all immunity (whether on the basis of sovereignty or otherwise) from jurisdiction, attachment (both before and after judgement) and execution to which it might otherwise be entitled in any action or proceeding in the courts of England or of any other country or jurisdiction relating in any way to this Agreement and agrees that it will not raise, claim or cause to be pleaded any such immunity at or in respect of any such action or proceeding.

## 27. MISCELLANEOUS

27.1 This Agreement constitutes the entire agreement and understanding of the Parties with respect to its subject matter and supersedes all oral communication and prior writings with respect thereto.

27.2 The Party (the **Relevant Party**) who has prepared the text of this Agreement for execution (as indicated in paragraph 9 of the Schedule) warrants and undertakes to the other Party that such text conforms exactly to the text of the standard form Global Master Securities Lending Agreement (~~2010~~2009 version) posted by the International Securities Lending Association on its website except as notified by the Relevant Party to the other Party in writing prior to the execution of this Agreement.

27.3 Unless otherwise provided for in this Agreement, no amendment in respect of this Agreement will be effective unless in writing (including a writing evidenced by a facsimile transmission) and executed by each of the Parties or confirmed by an exchange of telexes or electronic messages on an electronic messaging system.

27.4 The Parties agree that where paragraph 11 of the Schedule indicates that this paragraph 27.4 applies, this Agreement shall apply to all loans which are outstanding as at the date of this Agreement and which are subject to the securities lending agreement or agreements specified in paragraph 11 of the Schedule, and such Loans shall be treated as if they had been entered into under this Agreement, and the terms of such loans are amended accordingly with effect from the date of this Agreement.

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27.5 The Parties agree that where paragraph 12 of the Schedule indicates that this paragraph 27.5 applies, each may use the services of a third party vendor to automate the processing of Loans under this Agreement and that any data relating to such Loans received from the other Party may be disclosed to such third party vendors.

27.6 The obligations of the Parties under this Agreement will survive the termination of any Loan.

27.7 The warranties contained in paragraphs 13, 14 and 27.2 and in the Agency Annex will survive termination of this Agreement for so long as any obligations of either of the Parties pursuant to this Agreement remain outstanding.

27.8 Except as provided in this Agreement, the rights, powers, remedies and privileges provided in this Agreement are cumulative and not exclusive of any rights, powers, remedies and privileges provided by law.

27.9 This Agreement (and each amendment in respect of it) may be executed and delivered in counterparts (including by facsimile transmission), each of which will be deemed an original.

27.10 A person who is not a party to this Agreement has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any terms of this Agreement, but this does not affect any right or remedy of a third party which exists or is available apart from that Act.

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**EXECUTED by the PARTIES**

**SIGNED by** →

**COLBROOK LTD**

duly authorised for and →

on behalf of →

**SIGNED by** →

**RJM CAPITAL PENSION PLAN**

duly authorised for and →

on behalf of →

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**SCHEDULE****1. COLLATERAL**

1.1 The securities, financial instruments and deposits of currency set out in the table below with a cross marked next to them are acceptable forms of Collateral under this Agreement.

1.2 Unless otherwise agreed between the Parties, the Market Value of the Collateral delivered pursuant to paragraph 5 by Borrower to Lender under the terms and conditions of this Agreement shall on each Business Day represent not less than the Market Value of the Loaned Securities together with the percentage contained in the row of the table below corresponding to the particular form of Collateral, referred to in this Agreement as the Margin.

Security/Financial Instrument/ Deposit of Currency	Mark "X" if acceptable form of Collateral	Margin (%)
<u>Cash in Euro or any alternative currency.</u>	<u>X</u>	<u>0</u>

1.3 Basis of Margin Maintenance:

Paragraph 5.4 (aggregation) shall ~~not~~ apply.

~~Paragraph 5.4 (aggregation) applies unless the box is ticked.~~

1.4 Paragraph 5.6 (netting of obligations to deliver Collateral and redeliver Equivalent Collateral) shall ~~not~~ apply.

1.5 For the purposes of Paragraph 5.8, Notification Time means by 5 p.m. London time.

1.6 Paragraph 6.4 (indemnity for failure to redeliver Equivalent Non-Cash Collateral) shall ~~not~~ apply.

~~Paragraph 6.4 (indemnity for failure to redeliver Equivalent Non-Cash Collateral) applies unless the box is ticked.~~

**2. BASE CURRENCY**

The Base Currency applicable to this Agreement is ~~provided that if that currency ceases to be freely convertible the Base Currency shall be~~ [US Dollars] [Euro] [specify other currency]\* Euro.

**3. PLACES OF BUSINESS**

~~(See definition of Business Day.)~~ London

**4. MARKET VALUE**

(See definition of Market Value.)

**5. EVENTS OF DEFAULT**

Automatic Early Termination shall not apply in respect of Party A

Automatic Early Termination shall not apply in respect of Party B

**6. DESIGNATED OFFICE AND ADDRESS FOR NOTICES**

(a) **Designated office of Party A:**

Address for notices or communications to Party A:

Address: Harneys Services (Cayman) Limited, 3'd Floor, Queensgate House, 113 South Church street, George Town, P.O. Box 10240, Grand Cayman KY1-1002, Cayman Islands

Attention: Martin Smith



Facsimile No:

Telephone No: [+971 563407023](tel:+971563407023)

Electronic Messaging System Details: [martin.smith@colbrooklimited.com](mailto:martin.smith@colbrooklimited.com)

**(b) Designated office of Party B:**

Address for notices or communications to Party B:

Address: [1010 Fifth Avenue, Apt 1 D, New York, NY 10028, United States of America](#)

Attention: [Adam Larosa](#)

Facsimile No:

Telephone No:

Electronic Messaging System Details: [adam@RJMCapitalp.com](mailto:adam@RJMCapitalp.com)

**7.(a) Agent of Party A for Service of Process**

Name: [N/A](#)

Address: [N/A](#)

**(b) Agent of Party B for Service of Process**

Name: [N/A](#)

Address: [N/A](#)

**8. AGENCY**

~~Party A [may][will always]\* act as agent~~

~~Party B [may][will always]\* act as agent~~

~~The Addendum for Pooled Principal Transactions may apply to Party A~~

~~The Addendum for Pooled Principal Transactions may apply to Party B~~

Neither Party shall act as agent. Each Party shall act only as principal. The Agency Annex and the Addendum for Pooled Principal Transactions shall not apply.

**9. PARTY PREPARING THIS AGREEMENT**

~~Party A~~

~~Party B~~

Each Party.

**10. DEFAULT INTEREST**

Rate of default interest: [None](#)

**11. EXISTING LOANS**

Paragraph 27.4 ~~applies~~ does not apply.

~~[Overseas Securities Lenders Agreement dated ]\*~~

~~[Global Master Securities Lending Agreements dated ]\*~~

## 12. AUTOMATION

Paragraph 27.5 applies.

## AGENCY ANNEX

### 1. TRANSACTIONS ENTERED INTO AS AGENT

#### 1.1 Power for Lender to enter into Loans as agent

Subject to the following provisions of this paragraph, Lender may enter into Loans as agent (in such capacity, the **Agent**) for a third person (a **Principal**), whether as custodian or investment manager or otherwise (a Loan so entered into being referred to in this paragraph as an **Agency Loan**).

If the Lender has indicated in paragraph 8 of the Schedule that it may act as Agent, it must identify each Loan in respect of which it acts as Agent as an Agency Loan at the time it is entered into. If the Lender has indicated in paragraph 8 of the Schedule that it will always act as Agent, it need not identify each Loan as an Agency Loan.

#### 1.2 [Pooled Principal transactions

The Lender may enter into an Agency Loan on behalf of more than [one] Principal and accordingly the addendum hereto for pooled principal transactions shall apply.]\*

#### 1.3 Conditions for Agency Loan

A Lender may enter into an Agency Loan if, but only if:

(a) it provides to Borrower, prior to effecting any Agency Loan, such information in its possession necessary to complete all required fields in the format generally used in the industry, or as otherwise agreed by Agent and Borrower (**Agreed Format**), and will use its best efforts to provide to Borrower any optional information that may be requested by the Borrower for the purpose of identifying such Principal (all such information being the **Principal Information**). Agent represents and warrants that the Principal Information is true and accurate to the best of its knowledge and has been provided to it by Principal;

(b) it enters into that Loan on behalf of a single Principal whose identity is disclosed to Borrower (whether by name or by reference to a code or identifier which the Parties have agreed will be used to refer to a specified Principal) either at the time when it enters into the Loan or before the Close of Business on the next Business Day after the date on which Loaned Securities are transferred to the Borrower in the Agreed Format or as otherwise agreed between the Parties; and

(c) it has at the time when the Loan is entered into actual authority to enter into the Loan and to perform on behalf of that Principal all of that Principal's obligations under the agreement referred to in paragraph 1.5(b) below.

Agent agrees that it will not effect any Loan with Borrower on behalf of any Principal unless Borrower has notified Agent of Borrower's approval of such Principal, and has not notified Agent that it has withdrawn such approval (such Principal, an **Approved Principal**), with both such notifications in the Agreed Format.

Borrower acknowledges that Agent shall not have any obligation to provide it with confidential information regarding the financial status of its Principals; Agent agrees, however, that it will assist Borrower in obtaining from Agent's Principals such information regarding the financial status of such Principals as Borrower may reasonably request.

#### 1.4 Notification by Agent of certain events affecting any Principal

Agent undertakes that, if it enters as agent into an Agency Loan, forthwith upon becoming aware:

(a) of any event which constitutes an Act of Insolvency with respect to the relevant Principal; or

(b) of any breach of any of the warranties given in paragraph 1.6 below or of any event or circumstance which results in any such warranty being untrue if repeated by reference to the then current facts, it will inform Borrower of that fact and will, if so required by Borrower, furnish it with such additional information as it may reasonably request to the extent that such information is readily obtainable by Agent.

### 1.5 Status of Agency Loan

(a) Each Agency Loan shall be a transaction between the relevant Principal and Borrower and no person other than the relevant Principal and Borrower shall be a party to or have any rights or obligations under an Agency Loan. Without limiting the foregoing, Agent shall not be liable as principal for the performance of an Agency Loan, but this is without prejudice to any liability of Agent under any other provision of this Annex; and

(b) all the provisions of the Agreement shall apply separately as between Borrower and each Principal for whom the Agent has entered into an Agency Loan or Agency Loans as if each such Principal were a party to a separate agreement with Borrower in all respects identical with this Agreement other than this Annex and as if the Principal were Lender in respect of that agreement; provided that

(i) if there occurs in relation to the Agent an Event of Default or an event which would constitute an Event of Default if Borrower served written notice under any sub clause of paragraph 10 of the Agreement, Borrower shall be entitled by giving written notice to the Principal (which notice shall be validly given if given in accordance with paragraph 20 of the Agreement) to declare that by reason of that event an Event of Default is to be treated as occurring in relation to the Principal. If Borrower gives such a notice then an Event of Default shall be treated as occurring in relation to the Principal at the time when the notice is deemed to be given; and

(ii) if the Principal is neither incorporated in nor has established a place of business in Great Britain, the Principal shall for the purposes of the agreement referred to in paragraph 1.5(b) above be deemed to have appointed as its agent to receive on its behalf service of process in the courts of England the Agent, or if the Agent is neither incorporated nor has established a place of business in Great Britain, the person appointed by the Agent for the purposes of this Agreement, or such other person as the Principal may from time to time specify in a written notice given to the other Party.

If Lender has indicated in paragraph 6 of the Schedule that it may enter into Loans as agent, the foregoing provisions of this paragraph do not affect the operation of the Agreement as between Borrower and Lender in respect of any Loans into which Lender may enter on its own account as principal.

### 1.6 Warranty of authority by Lender acting as Agent

Agent warrants to Borrower that it will, on every occasion on which it enters or purports to enter into a Loan as an Agency Loan, have been duly authorised to enter into that Loan and perform the obligations arising under such Loan on behalf of the Principal in respect of that Loan and to perform on behalf of the Principal all the obligations of that person under the agreement referred to in paragraph 1.5(b) above.

## ADDENDUM FOR POOLED PRINCIPAL AGENCY LOANS

### 1. SCOPE

This addendum applies where the Agent wishes to enter into an Agency Loan on behalf of more than one Principal. The Agency Annex shall apply to such a Loan subject to the modifications and additional terms and conditions contained in paragraph 2 to 7 below.

### 2. INTERPRETATION

2.1 In this addendum:

(a) ***Collateral Transfer*** has the meaning given in paragraph 5.1 below;

(b) if at any time on any Business Day the aggregate Market Value of Posted Collateral in respect of all Agency Loans outstanding with a Principal under the Agreement exceeds the aggregate of the Required Collateral Value in respect of such Agency Loans, Borrower has a ***Net Loan Exposure*** to that Principal equal to that excess; if at any time on any Business Day the aggregate Market Value of Posted Collateral in respect of all Agency Loans outstanding under the Agreement with a Principal falls below the aggregate of the Required Collateral Value in respect of such Agency Loans, that Principal has a ***Net Loan Exposure*** to Borrower for such Agency Loans equal to that deficiency;

(c) ***Pooled Principal*** has the meaning given in paragraph 6(a) below; and

(d) ***Pooled Loan*** has the meaning given in paragraph 6(a) below

### 3. MODIFICATIONS TO THE AGENCY ANNEX

3.1 Paragraph 1.3(b) of the Agency Annex is deleted and replaced by the following:

"it enters into that Loan on behalf of one or more Principals and at or before the time when it enters into the Loan it discloses to Borrower the identity and the jurisdiction of incorporation, organisation or establishment of each such Principal (and such disclosure may be made either directly or by reference to a code or identifier which the Parties have agreed will be used to refer to a specified Principal);".

3.2 Paragraph 1.3(c) of the Agency Annex is deleted and replaced by the following:

"it has at the time when the Loan is entered into actual authority to enter into the Loan on behalf of each Principal and to perform on behalf of each Principal all of that Principal's obligations under the Agreement".

#### 4. ALLOCATION OF AGENCY LOANS

4.1 The Agent undertakes that if, at the time of entering into an Agency Loan, the Agent has not allocated the Loan to a Principal, it will allocate the Loan before the Settlement Date for that Agency Loan either to a single Principal or to several Principals, each of whom shall be responsible for only that part of the Agency Loan which has been allocated to it.

Promptly following such allocation, the Agent shall notify Borrower of the Principal or Principals (whether by name or reference to a code or identifier which the Parties have agreed will be used to refer to a specified Principal) to which that Loan or part of that Loan has been allocated.

4.2 Upon allocation of a Loan in accordance with paragraph 4.1 above or otherwise, with effect from the date on which the Loan was entered into:

(a) where the allocation is to a single Principal, the Loan shall be deemed to have been entered into between Borrower and that Principal; and

(b) where the allocation is to two or more Principals, a separate Loan shall be deemed to have been entered into between Borrower and each such Principal with respect to the appropriate proportion of the Loan.

4.3 If the Agent shall fail to perform its obligations under paragraph 4.2 above then for the purposes of assessing any damage suffered by Borrower (but for no other purpose) it shall be assumed that, if the Loan concerned (to the extent not allocated) had been allocated in accordance with that paragraph, all the terms of the Loan would have been duly performed.

#### 5. ALLOCATION OF COLLATERAL

5.1 Unless the Agent expressly allocates (a) a deposit or delivery of Posted Collateral or (b) a repayment of Cash Collateral or a redelivery of Equivalent Collateral (each a Collateral Transfer) before such time, the Agent shall, at the time of making or receiving that Collateral Transfer, be deemed to have allocated any Collateral Transfer in accordance with paragraph 6.3 below.

5.2 (a) If the Agent has made a Collateral Transfer on behalf of more than one Pooled Principal, that Collateral Transfer shall be allocated in proportion to Borrower's Net Loan Exposure in respect of each Pooled Principal at the Agent's close of business on the Business Day before the Collateral Transfer is made; and

(b) if the Agent has received a Collateral Transfer on behalf of more than one Pooled Principal, that Collateral Transfer shall be allocated in proportion to each Pooled Principal's Net Loan Exposure in respect of Borrower at the Agent's close of business on the Business Day before the Collateral Transfer is made.

(c) Sub paragraphs (a) and (b) shall not apply in respect of any Collateral Transfer which is effected or deemed to have been effected under paragraph 6.3 below.

#### 6. POOLED PRINCIPALS: REBALANCING OF MARGIN

6.1 Where the Agent acts on behalf of more than one Principal, the Parties may agree that, as regards all (but not some only) outstanding Agency Loans with those Principals, or with such of those Principals as they may agree ( *Pooled Principals*, such Agency Loans being *Pooled Loans*), any Collateral Transfers are to be made on an aggregate net basis.

6.2 Paragraphs 6.3 to 6.5 below shall have effect for the purpose of ensuring that Posted Collateral is, so far as is practicable, transferred and held uniformly, as between the respective Pooled Principals, in respect of all Pooled Loans for the time being outstanding under the Agreement.

6.3 At or as soon as practicable after the Agent's close of business on each Business Day on which Pooled Loans are outstanding (or at such other times as the Parties may from time to time agree) there shall be effected such Collateral Transfers as shall ensure that immediately thereafter

(a) in respect of all Pooled Principals which have a Net Loan Exposure to Borrower, the amount of Collateral then deliverable or Cash Collateral then payable by Borrower to each such Pooled Principal is equal to such proportion of the aggregate amount of Collateral then deliverable or Cash Collateral then payable, to all such Pooled Principals as corresponds to the proportion which the Net Loan Exposure of the relevant Pooled Principal bears to the aggregate of the Net Loan Exposures of all Pooled Principals to Borrower; and

(b) in respect of all Pooled Principals to which Borrower has a Net Loan Exposure, the aggregate amount of Equivalent Collateral then deliverable or repayable by each such Pooled Principal to Borrower is equal to such proportion of the aggregate amount of Equivalent Collateral then deliverable or repayable by all such Pooled Principals as corresponds to the proportion which the Net Loan Exposure of Borrower to the relevant Pooled Principal bears to the aggregate of the Net Loan Exposures of Borrower to all Pooled Principals.

6.4 Collateral Transfers effected under paragraph 6.3 shall be effected (and if not so effected shall be deemed to have been so effected) by appropriations made by the Agent and shall be reflected by entries in accounting and other records maintained by the Agent. Accordingly, it shall not be necessary for payments of cash or deliveries of Securities to be made through any settlement system for the purpose of such Collateral Transfers. Without limiting the generality of the foregoing, the Agent is hereby authorised and instructed by Borrower to do all such things on behalf of Borrower as may be necessary or expedient to effect and record the receipt on behalf of Borrower of cash and Securities from, and the delivery on behalf of Borrower of cash and Securities to, Pooled Principals in the course or for the purposes of any Collateral Transfer effected under that paragraph.

6.5 Promptly following the Collateral Transfers effected under paragraph 6.3 above, and as at the Agent's close of business on any Business Day, the Agent shall prepare a statement showing in respect of each Pooled Principal the amount of cash Collateral which has been paid, and the amount of non-cash Collateral of each description which have been transferred, by or to that Pooled Principal immediately after those Collateral Transfers. If Borrower so requests, the Agent shall deliver to Borrower a copy of the statement so prepared in a format and to a timetable generally used in the market.

## **7. WARRANTIES**

7.1 The Agent warrants to Borrower that

(a) all notifications provided to Borrower under paragraph 4.1 above and all statements provided to the other party under paragraph 6.5 above shall be complete and accurate in all material respects;

(b) at the time of allocating an Agency Loan in accordance with paragraph 4.1 above, each Principal or Principals to whom the Agent has allocated that Agency Loan or any part of that Agency Loan is duly authorised to enter into the Agency Loans contemplated by this Agreement and to perform its obligations thereunder; and

(c) at the time of allocating an Agency Loan in accordance with paragraph 4.1 above, no Event of Default or event which would constitute an Event of Default with the service of a Default Notice or other written notice under paragraph 14 of the Agreement has occurred in relation to any Principal or Principals to whom the Agent has allocated that Agency Loan or any part of that Agency Loan.

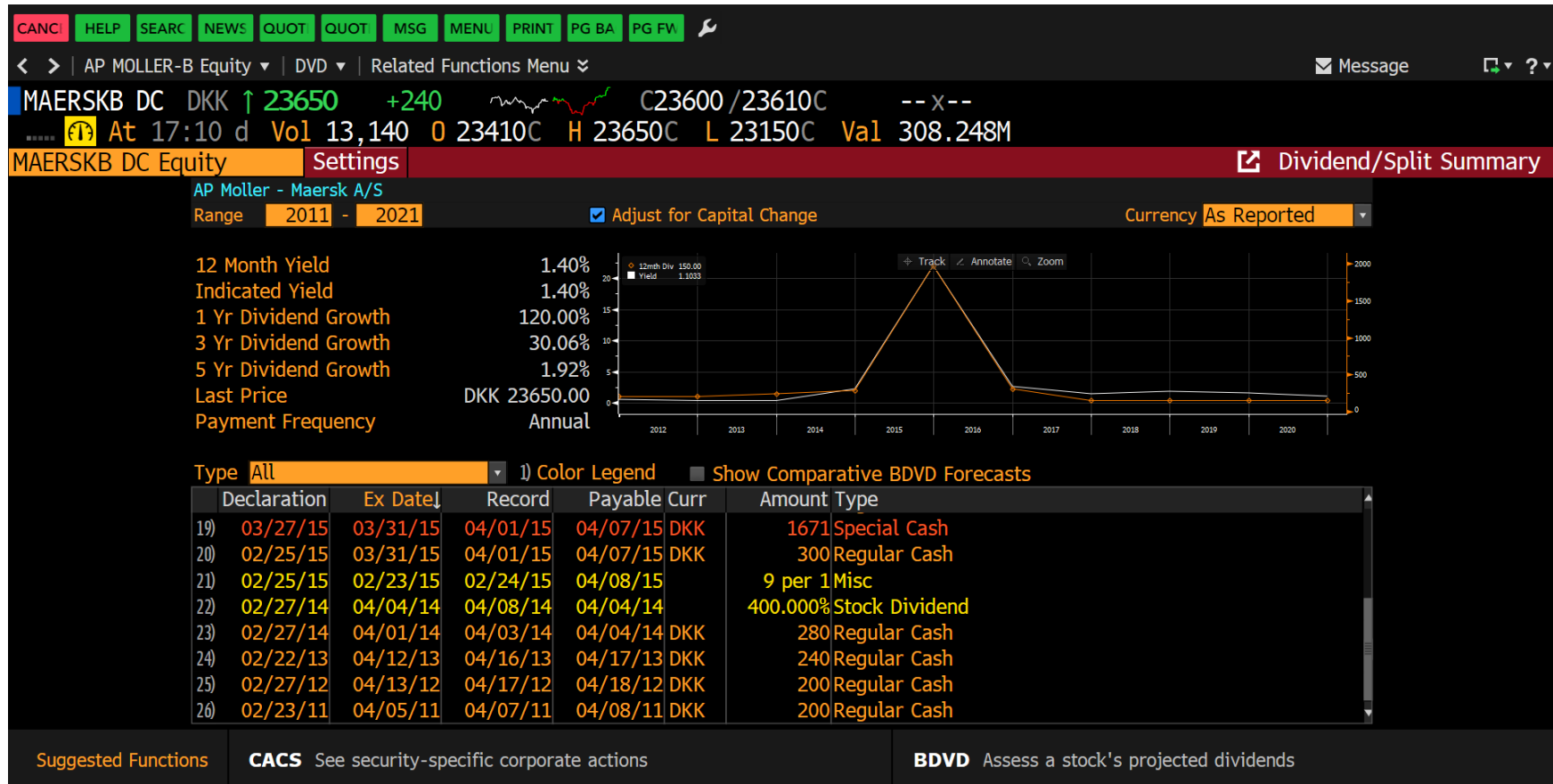
## Exhibit 12

## Closing Price of MAERSKB, April 16, 2013

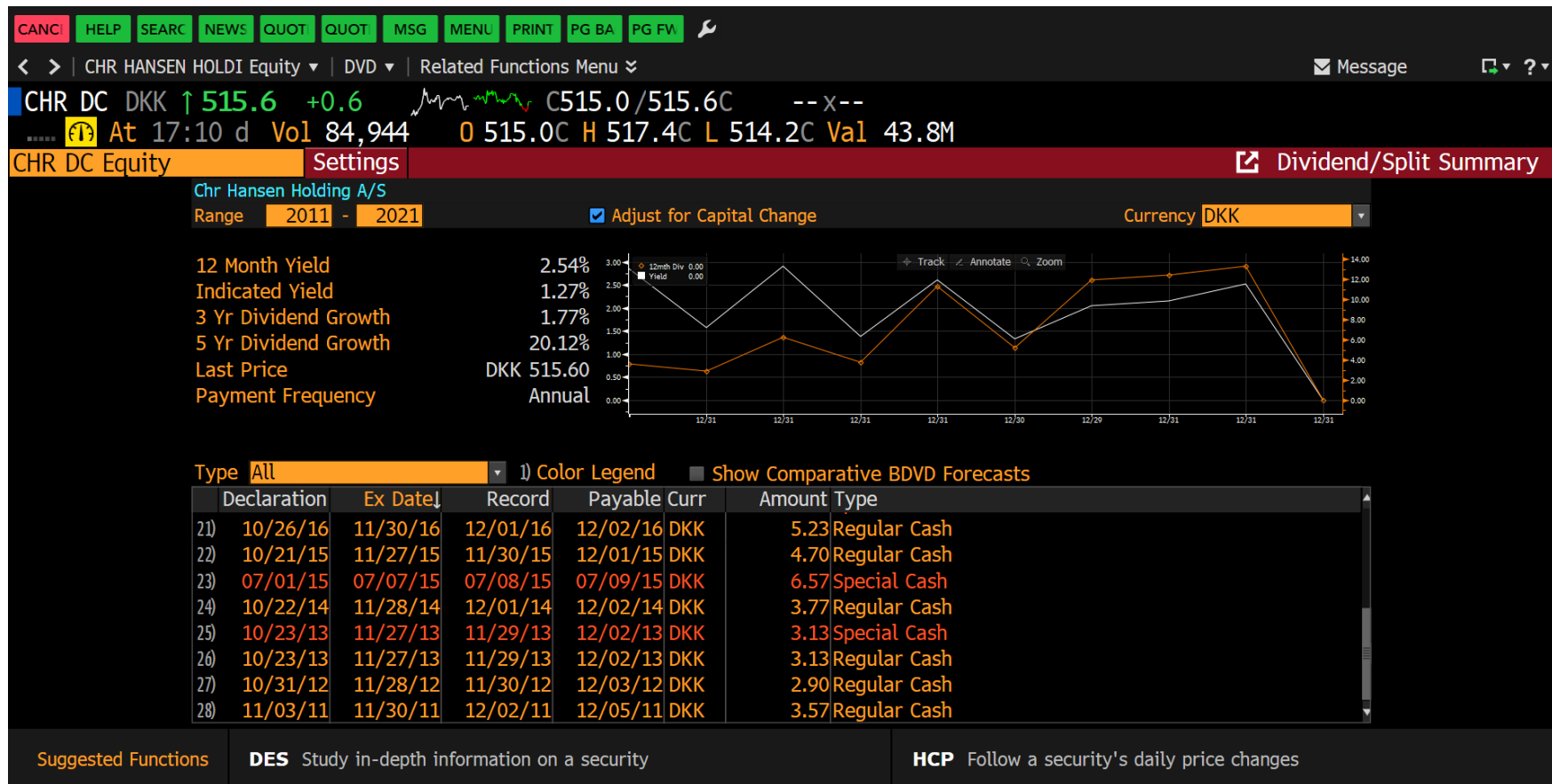


## Exhibit 13

## MAERSKB and Chr. Hansen Paid Annual Dividends







## MAERSKB Dividend Dates 2013

<b>&lt;Back&gt; to Return</b>		<b>Cash Dividend Details</b>	
Company	AP Moller - Maersk A/S	Ticker	MAERSKB DC DKK 23410.00
Security Type	Common Stock	ISIN	DK0010244508
Country of Issue	DK	SEDOL	4253048
Country of Domicile	DK		
Distribution Type	Regular Cash	Frequency	Annual
Announced Date	02/22/13	Currency	DKK
Ex Date	04/12/13	Gross Amount	240
Record Date	04/16/13		
Pay Date	04/17/13		
Adjustment Factor	0.972578		
		Action Id	74298997

## Exhibit 15

## Chr. Hansen Divided Dates, 2014

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Cash Dividend Details

Company	Chr Hansen Holding A/S	Ticker	CHR DC	DKK 502.60
Security Type	Common Stock	ISIN	DK0060227585	
Country of Issue	DK	SEDOL	B573M11	
Country of Domicile	DK			
Distribution Type	Regular Cash	Frequency	Annual	
Announced Date	10/22/14	Currency	DKK	
Ex Date	11/28/14	Gross Amount	3.77	
Record Date	12/01/14			
Pay Date	12/02/14			
Adjustment Factor	0.985438			

Suggested Functions

HP

Analyze a security's historical prices

GIP

Chart intraday price movements

**Exhibit 16**  
**Summary of Trading and Clearing Fees**  
**The RJM Plan April 2013 A.P. Moller-Maersk A/S Class B Shares Transaction**

	Security	Trade Type	Trade Date	Fee Type	Fee €	€/DKK [1]	Fee DKK
[2]	Stock	Purchase	4/11/2013	Executing Broker	-	-	11,356.88
[3]	Stock	Purchase	4/11/2013	Clearing	13.71	0.1341	102.24
[4]	Stock	Sale	6/13/2013	Clearing	13.51	0.1341	100.75
							<u>11,559.86</u>
[5]	Futures	Sale	4/11/2013	Clearing	31.20	0.1341	232.66
[6]	Futures	Sale	4/11/2013	Exchange	400.00	0.1341	2,982.85
[7]	Futures	Purchase	6/13/2013	Executing Broker	-	-	10,595.24
[8]	Futures	Purchase	6/13/2013	Clearing	31.20	0.1341	232.66
[9]	Futures	Purchase	6/13/2013	Exchange	400.00	0.1341	2,982.85
							<u>17,026.26</u>
[10]	N/A	N/A	5/1/2013	Custody	119.05	0.1341	887.75
[11]	N/A	N/A	7/3/2013	Custody	250.00	0.1340	1,865.67
							<u>2,753.42</u>
						<b>Total</b>	<b><u>31,339.55</u></b>

**Notes and Sources:**

[1]: €/DKK exchange rate on trade date. For custody fees, the exchange rate is from invoice date on the Solo invoice.

[2]: MPSKAT00077418-9 at MPSKAT00077419.

[3]: MPSKAT00080613-4 at MPSKAT00080614.

[4]: MPSKAT00086209-10 at MPSKAT00086210.

[5]: MPSKAT00080613-4 at MPSKAT00080614.

[6]: MPSKAT00080613-4 at MPSKAT00080614.

[7]: MPSKAT00085291.

[8]: MPSKAT00086209-10 at MPSKAT00086210.

[9]: MPSKAT00086209-10 at MPSKAT00086210.

[10]: MPSKAT00080613-4. RJM incurred total custody fees of €1,250 in April 2013 for 21 trades, including those involving MAERSKB. Because custody fees are presented as a total and not apportioned by each security, a pro-rata apportionment based on the number of MAERSKB trades as a percentage of total trades has been applied ( $€1,250 * (2/21) = €119.05$ ).

[11]: MPSKAT00086209-10. RJM incurred total custody fees of €1,250 in June 2013 for 10 trades, including those involving MAERSKB. Because custody fees are presented as a total and not apportioned by each security, a pro-rata apportionment based on the number of MAERSKB trades as a percentage of total trades has been applied ( $€1,250 * (2/10) = €250$ ).

**Exhibit 17**  
**Summary of Trading and Clearing Fees**  
**The Proper Pacific Plan November 2014 Chr. Hansen Transaction**

	Security	Trade Type	Trade Date	Fee Type	Fee \$	\$/DKK [1]	Fee DKK
[2]	Stock	Purchase	11/27/2014	Executing Broker	-	-	2,716.83
[3]	Stock	Purchase	11/27/2014	Clearing	18.71	0.1676	111.63
[4]	Stock	Sale	12/16/2014	Executing Broker	-	-	2,738.87
[5]	Stock	Sale	12/16/2014	Clearing	18.76	0.1681	111.60
							<u>5,678.94</u>
[6]	Forward	Sale	11/27/2014	Clearing	3,741.60	0.1676	22,324.58
[7]	Forward	Purchase	12/16/2014	Clearing	3,752.70	0.1681	22,324.21
							<u>44,648.79</u>
[8]	Stock	Loan	12/1/2014	Clearing	624.70	0.1676	3,727.33
[9]	Stock	Recall	12/16/2014	Clearing	625.45	0.1681	3,720.70
							<u>7,448.03</u>
[10]	N/A	N/A	11/28/2014	Platform	533.66	0.1673	3,189.82
[11]	N/A	N/A	12/31/2014	Platform	484.00	0.1625	2,978.46
							<u>6,168.28</u>
						<b>Total</b>	<b><u>63,944.04</u></b>

**Notes and Sources:**

[1]: \$/DKK exchange rate on trade date. For platform fees, the exchange rate is from month's settle date on the Old Park Lane invoice.

[2]: PROPPACIF000001327.

[3]: PROPPACIF00000109-12 at PROPPACIF00000111.

[4]: PROPPACIF000001396.

[5]: PROPPACIF00000109-12 at PROPPACIF00000111.

[6]: PROPPACIF00000109-12 at PROPPACIF00000111.

[7]: PROPPACIF00000109-12 at PROPPACIF00000111.

[8]: PROPPACIF00000109-12 at PROPPACIF00000112.

[9]: PROPPACIF00000109-12 at PROPPACIF00000112.

[10]: PROPPACIF00000109-12. Proper Pacific incurred total platform fees of \$1,867.80 in November 2014 for 7 trades, including those involving Chr. Hansen. Because platform fees are presented as a total and not apportioned by each security, a pro-rata apportionment based on the number of Chr. Hansen trades as a percentage of total trades has been applied ( $\$1,867.80 * (2/7) = \$533.66$ ).

[11]: PROPPACIF00000109-12. Proper Pacific incurred total platform fees of \$1,815.00 in December 2014 for 15 trades, including those involving Chr. Hansen. Because platform fees are presented as a total and not apportioned by each security, a pro-rata apportionment based on the number of Chr. Hansen trades as a percentage of total trades has been applied ( $\$1,815.00 * (4/15) = \$484.00$ ).